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THE WRITINGS OF

HENRY DAVID THOREAU

JOURNAL

EDITED BY BRADFORD TORREY

XII

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JOURNAL

VOLUME XII

THE JOURNAL OF HENRY DAVID THOREAU

VOLUME XII

I

MARCH, 1859 (ÆT. 41)

March 2. Wednesday. P. M.—To Cassandra Ponds and down river.

It is a remarkably cold day for March, and the river, etc., are frozen as solidly as in the winter and there is no water to be seen upon the ice, as usually in a winter day, apparently because it has chiefly run out from beneath on the meadows and left the ice, for often, as you walk over the meadows, it sounds hollow under your tread.

I see in the Deep Cut, on the left-hand, or east, side, just beyond the clay, a ravine lately begun, in a slightly different manner from the Clamshell one. The water running down the steep sand-bank (which is some thirty or thirty-five feet high), it being collected from the field above, had worn a channel from four to six inches wide, gradually, through the frozen crust of the sand, which was one to two feet thick, and, reaching the loose unfrozen sand beneath, had washed it downward, and out through the narrow channel lower

down, until quite a cavern was formed, whose bottom was eight or ten feet below the surface, while it was five or six feet wide. But within a few days the crust, thawing, had fallen in, and so the cavern, with its narrow "crack," or skylight, was turned into an open ravine, and there is no telling where the mischief will end.

The willow catkins by the railroad where you first come in sight of the [*sic*] have now all (on one or two bushes) crept out about an eighth of an inch, giving to the bushes already a very pretty appearance when you stand on the sunny side, the silvery-white specks contrasting with the black scales. Seen along the twigs, they are somewhat like small pearl buttons on a waistcoat. Go and measure to what length the silvery willow catkins have crept out beyond their scales, if you would know what time o' the year it is by Nature's clock.

As I go through the Cassandra Ponds, I look round on the young oak woods still clad with rustling leaves as in winter, with a feeling as if it were their last rustle before the spring, but then I reflect how far away still is the time when the new buds swelling will cause these leaves to fall. We thus commonly antedate the spring more than any other season, for we look forward to it with more longing. We talk about spring as at hand before the end of February, and yet it will be two good months, one sixth part of the whole year, before we can go a-maying. There may be a whole month of solid and uninterrupted winter yet, plenty of ice and good sleighing. We may not even see the bare ground, and hardly the water, and yet we sit down and warm our spirits an-

nually with this distant prospect of spring. As if a man were to warm his hands by stretching them toward the rising sun and rubbing them. We listen to the February cock-crowing and turkey-gobbling as to a first course, or prelude.

The bluebird which some woodchopper or inspired walker is said to have seen in that sunny interval between the snow-storms is like a speck of clear blue sky seen near the end of a storm, reminding us of an ethereal region and a heaven which we had forgotten. Princes and magistrates are often styled serene, but what is their turbid serenity to that ethereal serenity which the bluebird embodies? His Most Serene Birdship! His soft warble melts in the ear, as the snow is melting in the valleys around. The bluebird comes and with his warble drills the ice and sets free the rivers and ponds and frozen ground. As the sand flows down the slopes a little way, assuming the forms of foliage where the frost comes out of the ground, so this little rill of melody flows a short way down the concave of the sky. The sharp whistle of the blackbird, too, is heard like single sparks or a shower of them shot up from the swamps and seen against the dark winter in the rear.[1]

Under the alders at Well Meadow I see a few skunk-cabbage spathes fairly open on the side, and these may bloom after a day or two of pleasant weather. But for the most part, here and generally elsewhere, the spathes are quite small, slender, and closed as yet, or frost-bitten. The caltha leaves have grown decidedly. They

[1] [Channing, pp. 286, 287.]

make nearly a handful in one place, above the surface of the springy water, the leaves not yet quite flatted out, but curled up into a narrow ellipse. They barely peep above the water. Also what I take to be a kind of cress is quite fresh-looking, as if it had grown a little there. The chrysosplenium may have looked as it does, even under the snow, or all winter (?). It already, at any rate, makes pretty (dirty) green beds, about level with the surface of the water. These plants (*i. e.* first ones) are earlier than any pads, for the brooks, and ditches even, are generally frozen over still, firmly.

March 3. Going to Acton this morning, I saw some sparrows on the wall, which I think must have been the *F. hyemalis* (?).

P. M. — Up river to Nut Meadow Brook.

It is nearly as cold as yesterday. The piers of the bridge by the railroad bridge are adorned with very handsome salver or waiter shaped ice three or four feet in diameter (bottom upward), the crenate edges all around being adorned with bell-shaped pendants (produced by the melting (?) or perchance the water dashed against them).

Going by the solidago oak at Clamshell Hill bank, I heard a faint rippling note and, looking up, saw about fifteen snow buntings sitting in the top of the oak, all with their breasts toward me, — sitting so still and quite white, seen against the white cloudy sky, they did not look like birds but the ghosts of birds, and their

boldness, allowing me to come quite near, enhanced this impression. These were almost as white as snowballs, and from time [to time] I heard a low, soft rippling note from them. I could see no features, but only the general outline of plump birds in white. It was a very spectral sight, and after I had watched them for several minutes, I can hardly say that I was prepared to see them fly away like ordinary buntings when I advanced further. At first they were almost concealed by being almost the same color with the cloudy sky.

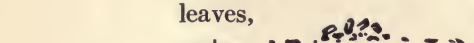
I see in that ditch (call it Grassy Ditch) near John Hosmer's second spring south of Nut Meadow Brook much grass which has lately grown an inch or more and lies flat on the water. Is it the *Glyceria fluitans?* It is somewhat frost-bitten too. It fills the ditch like moss, as seen at a little distance. It must be a very springy ditch to be thus open entirely. Also, pretty near the spring, I see a tuft of carex (?) whose stiff glaucous points have risen several inches above the surface.

See two small water-bugs at the spring; none elsewhere.

I see apparently some callitriche, fresh, in the spring.

We recross the river at Grindstone Meadow, but probably cannot to-morrow or next day there. The ice is spotted with dark crescents, — we tread on the white parts, — and it is puffed up along the middle, being at least six inches high in the middle where we cross.

All the lower part of steep southern slopes of hills is now commonly bare, — though the snow may be pretty deep on the brow, — especially the springy bases where the skunk-cabbage, etc., grow.

How imperceptibly the first springing takes place! In some still, muddy springs whose temperature is more equable than that of the brooks, while brooks and ditches are generally thickly frozen and concealed and the earth is covered with snow, and it is even cold, hard, and nipping winter weather, some fine grass which fills the water like a moss begins to lift its tiny spears or blades above the surface, which directly fall flat for half an inch or an inch along the surface, and on these (though many are frost-bitten) you may measure the length to which the spring has advanced, — has *sprung*. Very few indeed, even of botanists, are aware of this growth. Some of it appears to go on even under ice and snow, or, in such a place as I have described, if it is also sheltered by alders, or the like, you may see (as March 2d) a little green crescent of caltha leaves, raised an inch or so above the water,  with leaves but partially unrolled and looking as if it would withdraw beneath the surface again at night. This, I think, must be the most conspicuous and forward greenness of the spring. The small reddish radical leaves of the dock, too, are observed flat on the moist ground as soon as the snow has melted there, as if they had grown beneath it.

The mossy bank along the south side of Hosmer's second spring ditch is very interesting. There are many coarse, hair-like masses of that green and brown moss on its edge, hanging over the ditch, alternating with withered-looking cream-colored sphagnum tinged with rose-color, in protuberances, or mammæ, a foot across on the perpendicular side of the ditch. Cast water

on their cheeks, and they become much more reddish, yet hardly so interesting. This is while the top of the bank and all the hillside above is covered deep with snow. The pretty fingers of the *Lycopodium clavatum*, peeping out here and there amid the snow and hanging down the ditch-side, contrasting with the snow, are very interesting.

Channing tells me he has met with a sassafras tree in New Bedford woods, which, according to a string which he put round it, is eleven and three quarters feet in circumference at about three feet from the ground. They consider them very good for rails there, they are so light and durable.

Talk about reading! — a good reader! It depends on how he is heard. There may be elocution and pronunciation (recitation, say) to satiety, but there can be no good reading unless there is good hearing also. It takes two at least for this game, as for love, and they must coöperate. The lecturer will read best those parts of his lecture which are best heard. Sometimes, it is true, the faith and spirits of the reader may run a little ahead and draw after the good hearing, and at other times the good hearing runs ahead and draws on the good reading. The reader and the hearer are a team not to be harnessed tandem, the poor wheel horse supporting the burden of the shafts, while the leader runs pretty much at will, while the lecture lies passive in the painted curricle behind. I saw some men unloading molasses-hogsheads from a truck at a depot the other day, rolling them up an inclined plane. The truckman stood behind and shoved, after putting a

couple of ropes one round each end of the hogshead, while two men standing in the depot steadily pulled at the ropes. The first man was the lecturer, the last was the audience. It is the duty of the lecturer to team his hogshead of sweets to the depot, or Lyceum, place the horse, arrange the ropes, and shove; and it is the duty of the audience to take hold of the ropes and pull with all their might. The lecturer who tries to read his essay without being abetted by a good hearing is in the predicament of a teamster who is engaged in the Sisyphean labor of rolling a molasses-hogshead up an inclined plane alone, while the freight-master and his men stand indifferent with their hands in their pockets. I have seen many such a hogshead which had rolled off the horse and gone to smash, with all its sweets wasted on the ground between the truckman and the freight-house, — and the freight-masters thought that the loss was not theirs.

Read well! Did you ever know a full well that did not yield of its refreshing waters to those who put their hands to the windlass or the well-sweep? Did you ever suck cider through a straw? Did you ever know the cider to push out of the straw when you were not sucking, — unless it chanced to be in a complete ferment? An audience will draw out of a lecture, or enable a lecturer to read, only such parts of his lecture as they like. A lecture is like a barrel half full of some palatable liquor. You may tap it at various levels, — in the sweet liquor or in the froth or in fixed air above. If it is pronounced good, it is partly to the credit of the hearers; if bad, it is partly their fault. Some-

times a lazy audience refuses to coöperate and pull on the ropes with a will, simply because the hogshead is full and therefore heavy, when if it were empty, or had only a little sugar adhering to it, they would whisk it up the slope in a jiffy. The lecturer, therefore, desires of his audience a long pull, a strong pull, and all pull together. I have seen a sturdy truckman, or lecturer, who had nearly broken his back with shoving his lecture up such an inclined plane while the audience were laughing at him, at length, as with a last effort, set it a-rolling in amid the audience and upon their toes, scattering them like sheep and making them cry out with pain, while he drove proudly away. Rarely it is a very heavy freight of such hogsheads stored in a vessel's hold that is to be lifted out and deposited on the public wharf, and this is accomplished only after many a hearty pull all together and a good deal of heave-yo-ing.

March 4. Began to snow last evening, and it is now (early in the morning) about a foot deep, and raining.

P. M. — To E. Hosmer Spring. Down Turnpike and back by E. Hubbard's Close.

We stood still a few moments on the Turnpike below Wright's (the Turnpike, which had no wheel-track beyond Tuttle's and no track at all beyond Wright's), and listened to hear a spring bird. We heard only the jay screaming in the distance and the cawing of a crow. What a perfectly New England sound is this voice of the crow! If you stand perfectly still anywhere in the outskirts of the town and listen, stilling the almost

incessant hum of your own personal factory, this is perhaps the sound which you will be most sure to hear rising above all sounds of human industry and leading your thoughts to some far bay in the woods where the crow is venting his disgust. This bird sees the white man come and the Indian withdraw, but it withdraws not. Its untamed voice is still heard above the tinkling of the forge. It sees a race pass away, but it passes not away. It remains to remind us of aboriginal nature.

I find near Hosmer Spring in the wettest ground, which has melted the snow as it fell, little flat beds of light-green moss, soft as velvet, which have recently pushed up, and lie just above the surface of the water. They are scattered about in the old decayed trough. (And there are still more and larger at Brister's Spring.) They are like little rugs or mats and are very obviously of fresh growth, such a green as has not been dulled by winter, a very fresh and living, perhaps slightly glaucous, green. The myosotis and bitter cress are hardly clean and fresh enough for a new growth.[1] The radical leaves of the *Ranunculus repens* are conspicuous, but the worse for the wear; but the golden saxifrage has in one or two places decidedly and conspicuously grown, like the cowslip at Well Meadow and still more, rising in dense beds a half to three quarters of an inch above the water, the leaves, like those of the cowslip, only partly concealed and flatted out. This distinguishes the fresh-springing leaves of these two. Probably there is more of the chrysosplenium thus ad-

[1] But the last *is*, at Well Meadow. *Vide* [Mar. 5].

vanced in Concord than of the caltha.[1] I see none of the last here.

The surface of the snow thus rapidly melting and sinking (there are commonly some inches of water under it, the rain having soaked through), though still very fresh and pure white, is all cracked, as it were, like that of some old toadstools. It has sunk so much that every inequality in the surface of the ground beneath is more distinctly shown than when bare. The ruts of old wood-paths are represented in the surface a foot above, and the track of the man and of the dog that ran by the side of the team (in the old snow), — the *thread*, in short, of every valley. The surface of the snow, though so recent, is therefore, on account of the rain, very diversified. On steep slopes it is regularly furrowed, apparently by water that has flowed down it.

In the brook in Hubbard's Close I see the grass pushing up from the bottom four or five inches long and waving in the current, which has not yet reached the surface.

C. thinks this is called a *sap* snow, because it comes after the sap begins to flow.

The story goes that at the Social Club the other night Cyrus Stow, hearing that the lecture before the Lyceum by Alger was to be on "The Sophistry of Ennui" and not knowing what that was, asked in good faith if it went by wind or water.

March 5. Going down-town this forenoon, I heard a white-bellied nuthatch on an elm within twenty feet,

[1] There is also at Well Meadow on the 5th.

uttering peculiar notes and more like a song than I remember to have heard from it.[1] There was a chickadee close by, to which it may have been addressed. It was something like *to-what what what what what*, rapidly repeated, and not the usual *gnah gnah;* and this instant it occurs to me that this may be that earliest spring note which I hear, and have referred to a woodpecker! (This is before *I* have chanced to see a bluebird, blackbird, or robin in Concord this year.) It is the spring note of the nuthatch. It paused in its progress about the trunk or branch and uttered this lively but peculiarly inarticulate song, an awkward attempt to warble almost in the face of the chickadee, as if it were one of its kind. It was thus giving vent to the spring within it. If I am not mistaken, it is what I have heard in former springs or winters long ago, fabulously early in the season, when we men had but just begun to anticipate the spring, — for it would seem that we, in our anticipations and sympathies, include in succession the moods and expressions of all creatures. When only the snow had begun to melt and no rill of song had broken loose, a note so dry and fettered still, so inarticulate and half thawed out, that you might (and would commonly) mistake for the tapping of a woodpecker. As if the young nuthatch in its hole had listened only to the tapping of woodpeckers and learned that music, and now, when it would sing and give vent to its spring ecstasy and it can modulate only some notes like that, that is its theme still. That is its ruling idea of song and music, — only a little clangor and liquidity added

[1] Also the 21st March.

to the tapping of the woodpecker. It was the handle by which my thoughts took firmly hold on spring.

This herald of spring is commonly unseen, it sits so close to the bark.

P. M. — Up river to Well Meadow.

The snow melts and sinks very rapidly. This spring snow is peculiarly white and blinding. The inequalities of the surface are peculiar and interesting when it has sunk thus rapidly. I see crows walking about on the ice half covered with snow in the middle of the meadows, where there is no grass, apparently to pick up the worms and other insects left there since the midwinter freshet. We see one or two little gnats or mosquitoes in the air.

See a large light-colored hawk circling a long time over Fair Haven Hill, and another, probably its mate, starts away from Holden Wood and circles toward it. The last being nearest, I distinguished that its wings were black tipped. (I have no glass.) What can they be? I think that I have seen the same in previous springs. They are too light-colored for hen-hawks, and for a *pair* of marsh hawks, — being apparently alike. Then the fish hawk is said by the books not to get here nearly so early, and, beside, they would not circle about *so much* over the hill. The goshawk, which I next think of, has no black tip to wings that I can learn. May it not be the winter hawk of Wilson? for he says its primaries are black at the tips, and that [it] is lighter than the red-shouldered, of same species.

At the same time I see a crow going north or northeast, high over Fair Haven Hill, and, two or three

minutes after, two more, and so many more at intervals of a few minutes. This is apparently their spring movement. Turkeys gobble in some distant farmyard at the same time. At length the sun is seen to have come out and to be shining on the oak leaves on the south side of Bear Garden Hill, and its light appears to be exactly limited to them.

I saw on the ice, quite alive, some of those black water-beetles, which apparently had been left above by a rise of the river. Were they a *Gyrinus*? [1]

When I was last at Well Meadow, I saw where apparently a dozen hounds had all crossed the brook at exactly one point, leaving a great trail in the slosh above the ice, though there was but one track of a man. It reminded me of a buffalo-trail. Every half-mile, as you go up the river, you come to the tracks of one or two dogs which have recently crossed it without any man.

Those skunk-cabbage buds which are most advanced have cast off their outmost and often frost-bitten sheaths, and the spathe is broader and slightly opened (some three quarters of an inch or more already) and has acquired brighter and more variegated colors. The outside of the spathe shows some ripeness in its colors and markings, like a melon-rind, before the spadix begins to bloom. I find that many of the most forward spathes, etc., have been destroyed since I was here three days ago. Some animal has nibbled away a part of the spathes (or sometimes only a hole in it) — and

[1] No.

I see the fragments scattered about — and then eaten out the whole of the spadix. Indeed, but few forward ones are left. Is this a mouse or musquash? or a bird? The spadix is evidently a favorite titbit to some creature.

That more entire-leaved plant amid the early skunk-cabbage which I called a cress on the 3d has the bitter taste of cress. The common cress has in one place grown considerably, and is fresh and clean and very good to eat. I wonder that I do not see where some creatures have eaten it.

The sweet-gale brush seen in a mass at a little distance is considerably darker than the alders above it. This will do for the sweet-gale maze in November.

The cowslip there is very prominently flower-budded, lifting its yellow flower-buds above water in one place. The leaves are quite inconspicuous when they first come up, being rolled up tightly.

March 6. *Sunday.* P. M. — To Yellow Birch Swamp.

We go through the swamp near Bee-Tree, or Oak, Ridge, listening for blackbirds or robins and, in the old orchards, for bluebirds. Found between two of the little birches in the path (where they grow densely), in Indigo-bird Sprout-land, a small nest suspended between one and two feet above the ground, between two of the little birches. This is where I have seen the indigo-bird in summer, and the nest apparently answers to Wilson's account of that bird's, being fastened with saliva to the birch on each side. Wilson

says it is "built in a low bush . . . suspended between two twigs, one passing up each side." This is about the diameter of a hair-bird's nest within, composed chiefly of fine bark-shreds looking like grass and one or two strips of grape-vine bark, and very securely fastened to the birch on each side by a whitish silk or cobweb and saliva. It is thin, the lining being probably gone.

There is a very picturesque large black oak on the Bee-Tree Ridge, of this form:—

The genista is not evergreen, having turned brown, though it is still quite leafy. I could not find a single green shoot. It is correctly represented in Loudon's "Arboretum," in '44, as "a deciduous under-shrub." Yet in his "Encyclopædia," in '55, it is represented as "an evergreen shrub."

Measured a thorn which, at six inches from the ground, or the smallest place below the branches, — for it branches soon, — was two feet three inches in circumference. Cut off a barberry on which I counted some twenty-six rings, the broadest diameter being about three and a half inches. Both these were on the west side the Yellow Birch Swamp.

The slender black birches, with their catkined twigs gracefully drooping on all sides, are very pretty. Like the alders, with their reddish catkins, they express more life than most trees. Most trees look completely at rest, if not dead, now, but these look as if

the sap must be already flowing in them, — and in winter as well.

In woodland roads you see where the trees which were bent down by ice, and obstructed the way, were cut off the past winter; their tops lie on one side.

March 7. 6.30 A. M. — To Hill.

I come out to hear a spring bird, the ground generally covered with snow yet and the channel of the river only partly open. On the Hill I hear first the tapping of a small woodpecker. I then see a bird alight on the dead top of the highest white oak on the hilltop, on the topmost point. It is a shrike. While I am watching him eight or ten rods off, I hear robins down below, west of the hill. Then, to my surprise, the shrike begins to sing. It is at first a wholly ineffectual and inarticulate sound without any solid tone to it, a mere hoarse breathing, as if he were clearing his throat, unlike any bird that I know, — a shrill hissing. Then he uttered a kind of mew, a very decided mewing, clear and wiry, between that of a catbird and the note of the nuthatch, as if to lure a nuthatch within his reach; then rose into the sharpest, shrillest vibratory or tremulous whistling or chirruping on the very highest key. This high gurgling jingle was like some of the notes of a robin singing in summer. But they were very short spurts in all these directions, though there was all this variety. Unless you saw the shrike it would be hard to tell what bird it was. This variety of notes covered considerable time, but were sparingly uttered with intervals. It was a decided chinking sound — the

clearest strain — suggesting much ice in the stream. I heard this bird sing once before, but that was also in early spring, or about this time. It is said that they imitate the notes of the birds in order to attract them within their reach. Why, then, have I never heard them sing in the winter? (I have seen seven or eight of them the past winter quite near.) The birds which it imitated — if it imitated any this morning — were the catbird and the robin, neither of which probably would it catch, — and the first is not here to be caught. Hearing a peep, I looked up and saw three or four birds passing rather [*sic*], which suddenly descended and settled on this oak-top. They were robins, but the shrike instantly hid himself behind a bough and in half a minute flew off to a walnut and alighted, as usual, on its very topmost twig, apparently afraid of its visitors. The robins kept their ground, one alighting on the very point which the shrike vacated. Is not this, then, probably the spring note or pairing note or notes of the shrike?

The first note which I heard from the robins, far under the hill, was *sveet sveet*, suggesting a certain haste and alarm, and then a rich, hollow, somewhat plaintive *peep* or *peep-eep-eep*, as when in distress with young just flown. When you first see them alighted, they have a haggard, an anxious and hurried, look.

I hear several jays this morning.

I think that many of the nuts which we find in the crevices of bark, firmly wedged in, may have been placed there by jays, chickadees, etc., to be held fast while they crack them with their bills.

A lady tells me that she saw, last Cattle-Show Day, —— —— putting up a specimen of hairwork in a frame (by his niece) in the exhibition hall. I think it represented flowers, and underneath was written "this Hare was taken from 8 different heads." She made some sort of exclamation, betraying that there was some mistake in the writing, whereupon —— —— took it down and carried it off, but soon came back with a new description or label, "this hare was taken from 8 different heads," and thus it stood through the exhibition.

P. M. — To Ministerial Swamp.

I hear of two who saw bluebirds this morning, and one says he saw one yesterday.[1] This seems to have been the day of their general arrival here, but I have not seen one in Concord yet.

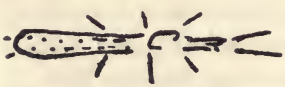
It is a good plan to go to some old orchard on the south side of a hill, sit down, and listen, especially in the morning when all is still. You can thus often hear the distant warble of some bluebird lately arrived, which, if you had been walking, would not have been audible to you. As I walk, these first mild spring days, with my coat thrown open, stepping over tinkling rills of melting snow, excited by the sight of the bare ground, especially the reddish subsoil, where it is exposed by a cutting, and by the few green radical leaves, I stand still, shut my eyes, and listen from time to time, in order to hear the note of some bird of passage just arrived.

There are few, if any, so coarse and insensible that

[1] *Vide* 9th.

they are not interested to hear that the bluebird has come. The Irish laborer has learned to distinguish him and report his arrival. It is a part of the news of the season to the lawyer in his office and the mechanic in his shop, as well as to the farmer. One will remember, perchance, to tell you that he saw one a week ago in the next town or county. Citizens just come into the country to live put up a bluebird box, and record in some kind of journal the date of the first arrival observed, — though it may be rather a late one. The farmer can tell you when he saw the first one, if you ask him within a week.

I see a great many of those glow-worm-like caterpillars observed in the freshet in midwinter, on the snowy ice in the meadows and fields now; also small beetles of various kinds, and other caterpillars. I think this unusual number is owing to that freshet, which washed them out of their winter quarters so long ago, and they have never got back to them. I also see — but their appearance is a regular early spring, or late winter, phenomenon — a great many of those slender black-bodied insects from one quarter to (with the feelers) one inch long, with six legs and long gray wings, two feelers before, and two forks or tails like feelers behind. The last are sometimes concealed by the wings. This is what I have called for convenience *Perla*. They are crawling slowly about over the snow. I have no doubt that crows eat some of the above-named caterpillars, but do other birds?



The mystery of the life of plants is kindred with that of our own lives, and the physiologist must not presume to explain their growth according to mechanical laws, or as he might explain some machinery of his own making. We must not expect to probe with our fingers the sanctuary of any life, whether animal or vegetable. If we do, we shall discover nothing but surface still. The ultimate expression or fruit of any created thing is a fine effluence which only the most ingenuous worshipper perceives at a reverent distance from its surface even. The cause and the effect are equally evanescent and intangible, and the former must be investigated in the same spirit and with the same reverence with which the latter is perceived. Science is often like the grub which, though it may have nestled in the germ of a fruit, has merely blighted or consumed it and never truly tasted it. Only that intellect makes any progress toward conceiving of the essence which at the same time perceives the effluence. The rude and ignorant finger is probing in the rind still, for in this case, too, the angles of incidence and excidence [*sic*] are equal, and the essence is as far on the other side of the surface, or matter, as reverence detains the worshipper on this, and only reverence can find out this angle instinctively. Shall we presume to alter the angle at which God chooses to be worshipped?

Accordingly, I reject Carpenter's explanation of the fact that a potato vine in a cellar grows toward the light, when he says, "The reason obviously is, that, in consequence of the loss of fluid from the tissue of the stem, on the side on which the light falls, it is contracted,

whilst that of the other side remains turgid with fluid; the stem makes a bend, therefore, until its growing point becomes opposite to the light, and then increases in that direction." (C.'s "Vegetable Physiology," page 174.)

There is no ripeness which is not, so to speak, something ultimate in itself, and not merely a perfected means to a higher end. In order to be ripe it must serve a transcendent use. The ripeness of a leaf, being perfected, leaves the tree at that point and never returns to it. It has nothing to do with any other fruit which the tree may bear, and only the genius of the poet can pluck it.

The fruit of a tree is neither in the seed nor the timber, — the full-grown tree, — but it is simply the highest use to which it can be put.

March 8. A rainy day.

P. M. — To Hill in rain.

To us snow and cold seem a mere delaying of the spring. How far we are from understanding the value of these things in the economy of Nature!

The earth is still mostly covered with ice and snow. As usual, I notice large pools of greenish water in the fields, on an icy bottom, which cannot owe their greenness to the reflected blue mingled with the yellowish light at sundown, as I supposed in the case of the green ice and water in clear winter days, for I see the former now at midday and in a rain-storm, when no sky is visible. I think that these green pools over an icy bottom must be produced by the yellow or common earth-

stain in the water mingling with the blue which is reflected from the ice. Many pools have so large a proportion of this yellow tinge as not to look green but yellow. The stain, the tea, of withered vegetation — grass and leaves — and of the soil supplies the yellow tint.

But perhaps those patches of emerald sky, sky just tinged with green, which we sometimes see, far in the horizon or near it, are produced in the same way as I thought the green ice was, — some yellow glow reflected from a cloud mingled with the blue of the atmosphere.

One might say that the yellow of the earth mingled with the blue of the sky to make the green of vegetation.

I see, under the pitch pines on the southwest slope of the hill, the reddish bud-scales scattered on the snow which fell on the 4th, and also settled an inch into it, and, examining, I find that in a great many cases the buds have been eaten by some creature and the scales scattered about, or, being opened, have closed over a cavity. Many scales rest amid the needles. There is no track on the snow, which is soft, but the scales must have been dropped within a day or two. I see near one pine, however, the fresh track of a partridge and where one has squatted all night. Tracks might possibly have been obliterated by the rapid melting of the snow the last day or two. Yet I am inclined to think that these were eaten by the red squirrel; or was it the crossbill? for this is said to visit us in the winter. Have I ever seen a squirrel eat the pine buds?[1]

There is a fine freezing rain with strong wind from the north; so I keep along under shelter of hills and

[1] Farmer does not know of squirrels eating pine buds.

woods, along their south sides, in my india-rubber coat and boots. Under the south edge of Woodis Park, in the low ground, I see many radical leaves of the *Solidago altissima* and another — I am pretty sure it is the *S. stricta* — and occasionally also of the *Aster undulatus*, and all are more or less lake beneath. The first, at least, have when bruised a strong scent. Some of them have recently grown decidedly. So at least several kinds of goldenrods and asters have radical leaves lake-colored at this season. The common strawberry leaves, too, are quite fresh and a handsome lake-color beneath in many cases. There are also many little rosettes of the radical leaves of the *Epilobium coloratum*, half brown and withered, with bright-green centres, at least. And even the under side of some mullein leaves is lake or crimson also.

There is but a narrow strip of bare ground reaching a few rods into the wood along the south edge, but the less ground there is bare, the more we make of it. Such a day as this, I resort where the partridges, etc., do — to the bare ground and the sheltered sides of woods and hills — and there explore the moist ground for the radical leaves of plants, while the storm blows overhead, and I forget how the time is passing. If the weather is thick and stormy enough, if there is a good chance to be cold and wet and uncomfortable, in other words to feel weather-beaten, you may consume the afternoon to advantage thus browsing along the edge of some near wood which would scarcely detain you at all in fair weather, and you will [be] as far away there as at the end of your longest fair-weather walk, and

come home as if from an adventure. There is no better fence to put between you and the village than a storm into which the villagers do not venture out.

I go looking for green radical leaves. What a dim and shadowy existence have now to our memories the fair flowers whose localities they mark! How hard to find any trace of the stem now, after it has been flattened under the snows of the winter! I go feeling with wet and freezing fingers amid the withered grass and the snow for these prostrate stems, that I may reconstruct the plant. But greenness so absorbs our attention that sometimes I do not see the former rising from the midst of those radical leaves when it almost puts my eyes out. The shepherd's-purse radical leaves are particularly bright.

I see there a dead white pine, some twenty-five feet high, which has been almost entirely stripped of its bark by the woodpeckers. Where any bark is left, the space between it and the wood is commonly closely packed with the gnawings of worms, which appear to have consumed the inner bark. But where the bark is gone, the wood also is eaten to some depth, and there are numerous holes penetrating deep into the wood. Over all this portion, which is almost all the tree, the woodpeckers have knocked off the bark and enlarged the holes in pursuit of the worms.

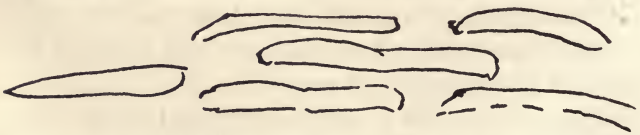
The fine rain with a strong north wind is now forming a glaze on my coat. When I get home the thermometer is at 29°. So a glaze seems to be formed when a fine rain is falling with the thermometer very little below the freezing-point.

Men of science, when they pause to contemplate "the power, wisdom, and goodness" of God, or, as they sometimes call him, "the Almighty Designer," speak of him as a total stranger whom it is necessary to treat with the highest consideration. They seem suddenly to have lost their wits.

March 9. P. M. — To Lee's Cliff with C.

C. says that he heard and saw a bluebird on the 7th, and R. W. E. the same. This was the day on which they were generally observed. I am doubtful about one having been seen on the 20th of February by a boy, as stated February 23d. C. also saw a skater-insect on the 7th, and a single blackbird flying over Cassandra Ponds, which he thought a grackle.

A true spring day, not a cloud in the sky. The earth shines, its icy armor reflecting the sun, and the rills of melting snow in the ruts shine, too, and water, where exposed in the right light on the river, is a remarkably living blue, just as the osiers appear brighter. Yet it is cool and raw and very windy. The ice over the channel of the river, when not quite melted, is now generally mackerelled (the water representing the blue por-



tions) with parallel openings, riddling it or leaving a sort of network of ice over it, answering to the ridges of the waves. You can best observe them from bridges. In some cases the snow upon the ice, having lain in

successive drifts, might also assist or modify this phenomenon.

The rain of yesterday has been filling the meadows again, flowing up under the dry ice of the winter freshet, which for the most part rested on the ground, and so this rise is at first the less observed until it shows itself beyond the edge of the ice.

At Corner Spring Brook the water reaches up to the crossing and stands over the ice there, the brook being open and some space on each side of it. When I look, from forty or fifty rods off, at the yellowish water covering the ice about a foot here, it is decidedly purple (though, when close by and looking down on it, it is yellowish merely), while the water of the brook-channel and a rod on each side of it, where there is no ice beneath, is a beautiful very dark blue. These colors are very distinct, the line of separation being the edge of the ice on the bottom, and this apparent juxtaposition of different kinds of water is a very singular and pleasing sight. You see a light-purple flood, about the color of a red grape, and a broad channel of dark-purple water, as dark as a common blue-purple grape, sharply distinct across its middle.

I see at Lee's the long, narrow radical leaves of the *Turritis stricta* just beginning to push their shoots, — the most forward-looking plant there.

We cross Fair Haven Pond on the ice, though it is difficult getting on and off, it being melted about the edges, as well as overflowed there.

It is worth while to hear the wind roar in the woods to-day. It sounds further off than it is.

Came across a stout and handsome woodchopper with a full dark or black beard, but that on his upper lip was a distinct sandy color. It was a very pleasing contrast, suggesting a sympathy with the centre of light and intelligence nearer to which it grew.

March 10. 6 A. M. — To Hill.

I see at near [*sic*] the stone bridge where the strong northwest wind of last night broke the thin ice just formed, and set the irregular triangular pieces on their edges quite perpendicular and directed northwest and southeast and pretty close together, about nine inches high, for half a dozen rods, like a dense fleet of schooners with their mainsails set.

And already, when near the road, I hear the warble of my first *Concord* bluebird, borne to me from the hill through the still morning air, and, looking up, I see him plainly, though so far away, a dark speck in the top of a walnut.

When I reach the Assabet above the Hemlocks, I hear a loud crashing or brattling sound, and, looking through the trees, see that it is the thin ice of the night, half an hour after sunrise, now swiftly borne down the stream in large fleets and going to wreck against the thick old ice on each side. This evidently is a phenomenon of the morning. The river, too, has just waked up, and, no doubt, a river in midsummer as well as in winter recognizes the advent of the morning as much as a man or an animal does. They retire at night and awake in the morning.

Looking northeast over Hosmer's meadow, I see

still the rosy light reflected from the low snow-spits, alternating with green ice there. Apparently because the angles of incidence and excidence are equal, therefore we see the green in ice at sundown when we look aslant over the ice, our visual ray making such an angle with it as the yellow light from the western horizon does in coming to it.

P. M. — To Witherell Vale.

There are some who never do nor say anything, whose life merely excites expectation. Their excellence reaches no further than a gesture or mode of carrying themselves. They are a sash dangling from the waist, or a sculptured war-club over the shoulder. They are like fine-edged tools gradually becoming rusty in a shop-window. I like as well, if not better, to see a piece of iron or steel, out of which many such tools will be made, or the bush-whack in a man's hand.[1]

When I meet gentlemen and ladies, I am reminded of the extent of the inhabitable and uninhabitable globe; I exclaim to myself, Surfaces! surfaces! If the outside of a man is so variegated and extensive, what must the inside be? You are high up the Platte River, traversing deserts, plains covered with soda, with no deeper hollow than a prairie-dog hole tenanted also by owls and venomous snakes.

As I look toward the woods (from Wood's Bridge), I perceive the spring in the softened air.[2] This is to me the most interesting and affecting phenomenon of the season as yet. Apparently in consequence of the very

[1] [Channing, p. 330.] [2] *Vide* April 15.

warm sun, this still and clear day, falling on the earth four fifths covered with snow and ice, there is an almost invisible vapor held in suspension, which is like a thin coat or enamel applied to every object, and especially it gives to the woods, of pine and oak intermingled, a softened and more living appearance. They evidently stand in a more genial atmosphere than before. Looking more low, I see that shimmering in the air over the earth which betrays the evaporation going on. Looking through this transparent vapor, all surfaces, not osiers and open waters alone, look more vivid. The hardness of winter is relaxed.

There is a fine effluence surrounding the wood, as if the sap had begun to stir and you could detect it a mile off. Such is the difference between an object seen through a warm, moist, and soft air and a cold, dry, hard one. Such is the genialness of nature that the trees appear to have put out feelers by which our senses apprehend them more tenderly. I do not know that the woods are ever more beautiful, or affect me more.

I feel it to be a greater success as a lecturer to affect uncultivated natures than to affect the most refined, for all cultivation is necessarily superficial, and its roots may not even be *directed toward* the centre of the being.

Rivers, too, like the walker, unbutton their icy coats, and we see the dark bosoms of their channels in the midst of the ice. Again, in pools of melted snow, or where the river has risen, I look into clear, placid water, and see the russet grassy bottom in the sun.

Look up or down the open channel now, so smooth, like a hibernating animal that has ventured to come out to the mouth of its burrow. One way, perhaps, it is like melted silver alloyed with copper. It goes nibbling off the edge of the thick ice on each side. Here and there I see a musquash sitting in the sun on the edge of the ice, eating a clam, and the clamshells it has left are strewn along the edge. Ever and anon he drops into the liquid mirror, and soon reappears with another clam. This clear, placid, silvery water is evidently a phenomenon of spring. Winter could not show us this.

A broad channel of water separates the dry land from the ice, and the musquash-hunter finds it hard to reach the game he has shot on the ice.

Fine red-stemmed mosses have begun to push and bud on Clamshell bank, growing in the Indian ashes where surface taken off. Carpenter says, "The first green crust upon the cinders with which the surface of Ascension Island was covered, consisted of minute mosses."

We sit in the sun on the side of Money-Diggers' Hill, amid the crimson low blueberry shoots and the withered *Andropogon scoparius* and the still erect *Solidago arguta* (var. the common) and the tall stubble thickly hung with fresh gleaming cobwebs. There are some grayish moths out, etc.; some gnats.

I see the bridge far away over the ice resting on its black piers above the ice which is lifted around it. It is short-legged now. This level or horizontal line resting on perpendicular black ones is always an interesting sight to me.

As we sit in this wonderful air, many sounds — that of woodchopping, for one — come to our ears agreeably blunted or muffled, even like the drumming of a partridge, not sharp and rending as in winter and recently. If a partridge should drum in winter, probably it would not reverberate so softly through the wood and sound indefinitely far. Our voices, even, sound differently and betray the spring. We speak as in a house, in a warm apartment still, with relaxed muscles and softened voices. The voice, like a woodchuck in his burrow, is met and lapped in and encouraged by all genial and sunny influences. There may be heard now, perhaps, under south hillsides and the south sides of houses, a slight murmur of conversation, as of insects, out of doors.

These earliest spring days are peculiarly pleasant. We shall have no more of them for a year. I am apt to forget that we may have raw and blustering days a month hence. The combination of this delicious air, which you do not want to be warmer or softer, with the presence of ice and snow, you sitting on the bare russet portions, the south hillsides, of the earth, this is the charm of these days. It is the summer beginning to show itself like an old friend in the midst of winter. You ramble from one drier russet patch to another. These are your stages. You have the air and sun of summer, over snow and ice, and in some places even the rustling of dry leaves under your feet, as in Indian-summer days.

The bluebird on the apple tree, warbling so innocently to inquire if any of its mates are within call, —

the angel of the spring! Fair and innocent, yet the offspring of the earth. The color of the sky above and of the subsoil beneath. Suggesting what sweet and innocent melody (terrestrial melody) may have its birthplace between the sky and the ground.

Two frogs (may have been *Rana fontinalis;* did not see them) jumped into Hosmer's grassy ditch.

See in one place a small swarm of insects flying or gyrating, dancing like large tipulidæ. The dance within the compass of a foot always above a piece of snow of the same size in the midst of bare ground.

The most ornamental tree I have seen this spring was the willow full of catkins now showing most of their down, in front of Puffer's house.

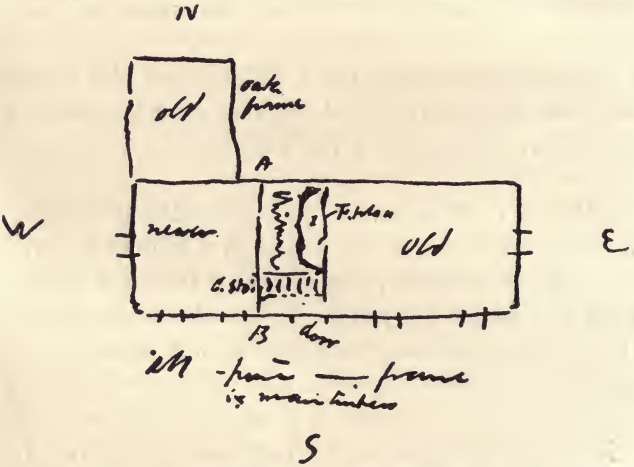
March 11. 6 A. M. — By riverside I hear the song of many song sparrows, the most of a song of any yet. And on the swamp white oak top by the stone bridge, I see and hear a red-wing. It sings almost steadily on its perch there, sitting all alone, as if to attract companions (and I see two more, also solitary, on different tree-tops within a quarter of a mile), calling the river to life and tempting ice to melt and trickle like its own sprayey notes. Another flies over on high, with a *tchuck* and at length a clear whistle. The birds anticipate the spring; they come to melt the ice with their songs.

But methinks the sound of the woodpecker tapping is as much a spring note as any these mornings; it echoes peculiarly in the air of a spring morning.

P. M. — To Hunt house.

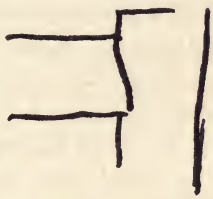
I go to get one more sight of the old house which Hosmer is pulling down, but I am too late to see much of it. The chimney is gone and little more than the oblong square frame stands. E. Hosmer and Nathan Hosmer are employed taking it down. The latter draws all the nails, however crooked, and puts them in his pockets, for, being wrought ones, he says it is worth the while.

It appears plainly, now that the frame is laid bare,



that the eastern two-thirds of the main house is older than the western third, for you can see where the west part has been added on, at the line A B. All the joists in the old part are hewn; in the newer, sawn. But very extensive repairs had been made in the old part, probably at the same time with the addition. Also the back part had been added on to the new part, merely

butted on at one side without tenant or mortise. The peculiar cedar laths were confined to the old part. The whole has oak sills and pine timbers. The two Hosmers were confident that the chimney was built at the same time with the new part, because, though there were flues in it from the new part, there was no break in the courses of brick about them. On the chimney was the date 1703 (?), — I think that was it, — and if this was the date of the chimney, it would appear that the old part belonged to the Winthrops, and it may go back to near the settlement of the town. The laths long and slender of white cedar split. In the old part the ends of the timbers were not merely mortised into the posts, but rested on a shoulder thus:



The fireplace measures twelve feet wide by three deep and a half high. The mantel-tree is log, fourteen feet long and some fifteen to sixteen inches square at the ends, but one half cut away diagonally between the ends, and now charred. It would take three men to handle it easily. The timbers of the old part had been cased and the joists plastered over at some time, and, now that they were uncovered, you saw many old memorandums and scores in chalk on them, as "May ye 4th," "Ephraim Brown," "0—3s—4d," "oxen 𝍸," — so they kept their score or tally, — such as the butcher and baker sometimes make. Perhaps the occupant had let his neighbor have the use of his oxen so many days. I asked if they had

found any old coins. N. Hosmer answered, Yes, he had, and showed it me, — took it out of his pocket. It was about as big as a quarter of a dollar, with "Britain," etc., legible, "Geo II," and date "1742," but it was of lead. But there was no manuscript, — not a copy of verses, only these chalk records of butter and cheese, oxen and bacon, and a counterfeit coin, out of the smoky recesses. Very much such relics as you find in the old rats' nests in which these houses abound.[1]

My mother says that she has been to the charitable society there. One old jester of the town used to call it "the *chattable* society."

Mrs. A. takes on dolefully on account of the solitude in which she lives, but she gets little consolation. Mrs. B. says she envies her that retirement. Mrs. A. is aware that she does, and says it is as if a thirsty man should envy another the river in which he is drowning. So goes the world. It is either this extreme or that. Of solitude one gets too much and another not enough.

E. Hosmer says that a man told him that he had seen my uncle Charles take a twelve-foot ladder, set it up straight, and then run up and down the other side, kicking it from behind him as he went down. E. H. told of seeing him often at the tavern toss his hat to the ceiling, twirling it over, and catch it on his head every time.

Large flocks of blackbirds to-day in the elm-tops and other trees. These are the first conspicuous large

[1] *Vide* [pp. 46–48]. [See *Excursions*, p. 201; Riv. 247.]

flocks of birds. J. Farmer says he saw ducks this morning and has seen larks some days. Channing saw geese to-day.

Find out as soon as possible what are the best things in your composition, and then shape the rest to fit them. The former will be the midrib and veins of the leaf.

There is always some accident in the best things, whether thoughts or expressions or deeds. The memorable thought, the happy expression, the admirable deed are only partly ours. The thought came to us because we were in a fit mood; also we were unconscious and did not know that we had said or done a good thing. We must walk consciously only part way toward our goal, and then leap in the dark to our success. What we do best or most perfectly is what we have most thoroughly learned by the longest practice, and at length it falls from us without our notice, as a leaf from a tree. It is the *last* time we shall do it, — our unconscious leavings.

March 12. *Saturday.* P. M. — Walk in rain to Ministerial Swamp.

Going up the railroad in this rain, with a south wind, I see a pretty thick low fog extending across the railroad only against Dennis's Swamp. There being much more ice and snow within the swamp, the vapor is condensed and is blown northward over the railroad. I see these local fogs with always the same origin, *i. e.*, large masses of snow or ice, in swamps or woods, perhaps the north sides of hills, in several places after-

ward. The air is warm. As often as we came to a particularly icy or snowy place, as Harrington's road in woods, we found ourselves in a fog.

It is a regular spring rain, such as I remember walking in, — windy but warm. It alternately rains hard and then holds up a little. A similar alternation we see in the waves of water and all undulating surfaces, — in snow and sand and the clouds (the mackerel sky). Now you walk in a comparative lull, anticipating fair weather, with but a slight drizzling, and anon the wind blows and the rain drives down harder than ever. In one of these lulls, as I passed the Joe Hosmer (rough-cast) house, I thought I never saw any bank so handsome as the russet hillside behind it. It is a very barren, exhausted soil, where the cladonia lichens abound, and the lower side is a flowing sand, but this russet grass with its weeds, being saturated with moisture, was in this light the richest brown, methought, that I ever saw. There was the pale brown of the grass, red browns of some weeds (sarothra and pinweed probably), dark browns of huckleberry and sweet-fern stems, and the very visible green of the cladonias thirty rods off, and the rich brown fringes where the broken sod hung over the edge of the sand-bank. I did not see the browns of withered vegetation so rich last fall, and methinks these terrestrial lichens were never more fair and prominent. On some knolls these vivid and rampant lichens as it were dwarf the oaks. A peculiar and unaccountable light seemed to fall on that bank or hillside, though it was thick storm all around. A sort of Newfoundland sun seemed to be shining on

it. It was such a light that you looked around for the sun that might be shining on it. Both the common largest and the very smallest hypericums (*Sarothra*) and the pinweeds were very rich browns at a little distance, coloring whole fields, and also withered and fallen ferns, reeking wet. It was a prospect to excite a reindeer. These tints of brown were as softly and richly fair and sufficing as the most brilliant autumnal tints.[1] In fair and dry weather these spots may be commonplace, but now they are worthy to tempt the painter's brush. The picture should be the side of a barren lichen-clad hill with a flowing sand-bank beneath, a few blackish huckleberry bushes here and there, and bright white patches of snow here and there in the ravines, the hill running east and west and seen through the storm from a point twenty or thirty rods south. This kind of light, the air being full of rain and all vegetation dripping with it, brings out the browns wonderfully.[2]

I notice now particularly the sallows by the railroad, full of dark cones, as a fruit. The broad radical leaves of (apparently) water dock are very fresh and conspicuous.

See two ducks flying over Ministerial Swamp.

In one place in the meadow southeast of Tarbell's, I find on the ice, about a couple of holes an inch across where a little stubble shows itself, a great many small ants dead, — say a thousand. They are strewn about the holes for six or eight inches, and are collected in a dense heap about the base of the stubble. I take up

[1] [Channing, p. 294.]

[2] *Vide* [p. 45].

a mass of them on my knife, each one entire, but now, of course, all wet and adhering together. It looks as if they had been tempted out by the warmth of the sun and had been frozen or drowned; or is it possible that they were killed by the frost last fall and now washed up through the ice? I think, from their position around the base of the stubble in that little hole in the ice, that they came out of the earth and clustered there since the ice melted to that extent. There are many other insects and worms and caterpillars (and especially spiders, dead) on the ice, there as well as elsewhere.

I perceive that a freshet which washes the earth bare in the winter and causes a great flow of water over it in that state — when it is not soaked up — must destroy a great many insects and worms. I find a great many that appear to have been drowned rather than frozen. May not this have tempted the bluebirds on early this year?

March 13. 7 A. M. — *F. hyemalis* in yard.

Going down railroad, listening *intentionally*, I hear, far through the notes of song sparrows (which are very numerous), the song of one or two larks. Also hearing a coarse *chuck*, I look up and see four blackbirds, whose size and long tails betray them crow blackbirds.[1] Also I hear, I am pretty sure, the cackle of a pigeon woodpecker.

The bright catkins of the willow are the springing most generally observed.

[1] [Two interrogation-points in pencil here.]

P. M. — To Great Fields.

Water rising still. Winter-freshet ice on meadows still more lifted up and partly broken in some places. The broad light artery of the river (and some meadows, too) very fair in the distance from Peter's.

Talking with Garfield to-day about his trapping, he said that mink brought three dollars and a quarter, a remarkably high price, and asked if I had seen any. I said that I commonly saw two or three in a year. He said that he had not seen one alive for eight or ten years. "But you trap them?" "O yes," he said. "I catch thirty or forty dollars' worth every winter." This suggests how little a trapper may see of his game. Garfield caught a skunk lately.

In some meadows I see a great many dead spiders on the ice, where apparently it has been overflowed — or rather it was the heavy rain, methinks — when they had no retreat.

Hear a ground squirrel's sharp chirrup, which makes you start, it is so sudden; but he is probably earthed again, for I do not see him.

On the northeast part of the Great Fields, I find the broken shell of a *Cistudo Blandingii*, on very dry soil. This is the fifth, then, I have seen in the town. All the rest were three in the Great Meadows (one of them in a ditch) and one within a rod or two of Beck Stow's Swamp.

It is remarkable that the spots where I find most arrowheads, etc., being light, dry soil, — as the Great Fields, Clamshell Hill, etc., — are among the first to be bare of snow, and the frost gets out there first. It

is very curiously and particularly true, for the only parts of the northeast section of the Great Fields which are so dry that I do not slump there are those small in area, where perfectly bare patches of sand occur, and there, singularly enough, the arrowheads are particularly common. Indeed, in some cases I find them only on such bare spots a rod or two in extent where a single wigwam might have stood, and not half a dozen rods off in any direction. Yet the difference of level may not be more than a foot, — if there is any. It is as if the Indians had selected precisely the driest spots on the whole plain, with a view to their advantage at this season. If you were going to pitch a tent to-night on the Great Fields, you would inevitably pitch on one of these spots, or else lie down in water or mud or on ice. It is as if they had chosen the site of their wigwams at this very season of the year.

I see a small flock of blackbirds flying over, some rising, others falling, yet all advancing together, one flock but many birds, some silent, others tchucking, — incessant alternation. This harmonious movement as in a dance, this agreeing to differ, makes the charm of the spectacle to me. One bird looks fractional, naked, like a single thread or ravelling from the web to which it belongs. Alternation! Alternation! Heaven and hell! Here again in the flight of a bird, its ricochet motion, is that undulation observed in so many materials, as in the mackerel sky.

If men were to be destroyed and the books they have written [were to] be transmitted to a new race of creatures, in a new world, what kind of record would be

found in them of so remarkable a phenomenon as the rainbow?

I cannot easily forget the beauty of those terrestrial browns in the rain yesterday. The withered grass was not of that very pale hoary brown that it is to-day, now that it is dry and lifeless, but, being perfectly saturated and dripping with the rain, the whole hillside seemed to reflect a certain yellowish light, so that you looked around for the sun in the midst of the storm. All the yellow and red and leather-color in the fawn-colored weeds was more intense than at any other season. The withered ferns which fell last fall — pinweeds, sarothra, etc. — were actually a *glowing* brown for the same reason, being all dripping wet. The cladonias crowning the knolls had visibly expanded and erected themselves, though seen twenty rods off, and the knolls appeared swelling and bursting as with yeast. All these hues of brown were most beautifully blended, so that the earth appeared covered with the softest and most harmoniously spotted and tinted tawny fur coat of any animal. The very bare sand slopes, with only here and there a thin crusting of mosses, was [*sic*] a richer color than ever it is.

In short, in these early spring rains, the withered herbage, thus saturated, and reflecting its brightest withered tint, seems in a certain degree to have revived, and sympathizes with the fresh greenish or yellowish or brownish lichens in its midst, which also seem to have withered. It seemed to me — and I think it may be the truth — that the abundant moisture, bringing out the highest color in the brown surface of the earth,

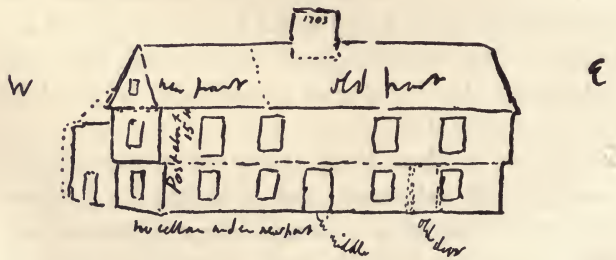
generated a certain degree of light, which, when the rain held up a little, reminded you of the sun shining through a thick mist.

Oak leaves which have sunk deep into the ice now are seen to be handsomely spotted with black (of fungi or lichens?), which spots are rarely perceived in dry weather.

All that vegetable life which loves a superfluity of moisture is now rampant, cold though it is, compared with summer. Radical leaves are as bright as ever they are.

The barrenest surfaces, perhaps, are the most interesting in such weather as yesterday, when the most terrene colors are seen. The wet earth and sand, and especially subsoil, are very invigorating sights.

The Hunt house, to draw from memory, — though I have given its measures within two years in my Journal, — looked like this: —



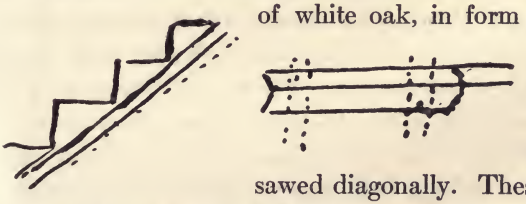
This is only generally correct, without a scale.

Probably grackles have been seen some days. I think I saw them on the 11th? Garfield says he saw black ducks yesterday.

March 14. P. M. — To Hunt house.

I thought from the above drawing that the original door must have been in the middle of the old part and not at one end, and that I should detect it in the manner in which the studs were set in. I really did so and found some other traces of the old door (where I have dotted it) when I got there. Some of the chalk-marks which have been preserved under the casing of the timbers so long have been completely washed off in yesterday's rain, as the frame stood bare. Also read in chalk on a chamber floor joist (which had been plastered over beneath) "enfine Brown," so many s. and d., and what most read for "Feb 1666," but, being written over a rough knot, it is doubtful. "Hides 3."

Saw E. Hosmer take up the cellar stairs. They are of white oak, in form like one half of a squared white oak log



sawed diagonally. These lie flat on their broadest sides on the slanting earth, resting near each end on a horse, which is a white oak stick with the bark on, hewed on the upper side and sunk in the earth, and they are fastened to this by two pins of wood placed as I have indicated.

I judge by my eye that the house is fifteen feet high to the eaves. The posts are remarkably sawn and hewn away on account of the projection of the upper story, so that they are more than twice as large above

as below, thus: the corner posts being cut on two sides or more than half away (six inches off them) below the second story. The chimney was laid in clay. "T. B." were perhaps the initials of Thomas Brown; also "I. [?] H. D."

The cowslip in pitcher has fairly blossomed to-day.

I see a large flock of grackles searching for food along the water's edge, just below Dr. Bartlett's. Some wade in the water. They are within a dozen rods of me and the road. It must be something just washed up that they are searching for, for the water has just risen and is still rising fast. Is it not insects and worms washed out of the grass? and perhaps the snails? When a grackle sings, it is as if his mouth were full of cotton, which he was trying to spit out.

The river is still rising. It is open [?] and generally over the meadows. The meadow ice is rapidly breaking up. Great cakes half a dozen rods long are drifted down against the bridges. There is a strong current on the meadow, not only north along the causeway, but south along the north end of the causeway, the water thus rushing both ways toward the only outlet at the bridge. This is proved by great cakes of ice floating swiftly along parallel with the causeway, but in opposite directions, to meet at the bridge. They are there soon broken up by the current after they strike the abutments. I see a large cake eight feet wide and ten inches thick, just broken off, carried under the bridge in a vertical position and wholly under water, such is the pressure there. This shows to what an extent the causeways and bridges act as dams to the flood.

March 15. Rainy day and southerly wind.

I come home in the evening through a very heavy rain after two brilliant rainbows at sunset, the first of the year.

March 16. 6 A. M. — The water is just over the slanting iron truss, four feet from its east end, and still rising.

P. M. — Launch my boat and sail to Ball's Hill.

It is fine clear weather and a strong northwest wind. What a change since yesterday! Last night I came home through as incessant heavy rain as I have been out in for many years, through the muddiest and wettest of streets, still partly covered with ice, and the rain-water stood over shoes in many places on the sidewalks. I heard of several who went astray in this water and had adventures in the dark. You require india-rubber boots then. But to-day I see the children playing at hop-scotch on those very sidewalks, with a bed marked in the dry sand. So rapid are the changes of weather with us, and so porous our soil.

With a strong wind we sail over the Red Bridge road. The water is falling over the lower side of the road as over a dam. For the road really operates as a dam, the water being much lower on the east side.

A new phase of the spring is presented; a new season has come. By the soaking rain and the wind of yesterday especially, the remaining snow and ice has been almost entirely swept away, and the ice has been broken, floated off, and melted, and much frost taken out of the ground; and now, as we glide over the Great

Meadows before this strong wind, we no longer see dripping, saturated russet and brown banks through rain, hearing at intervals the alarm notes of the early robins, — banks which reflect a yellowish light, — but we see the bare and now pale-brown and dry russet hills. The earth has cast off her white coat and come forth in her clean-washed sober russet early spring dress. As we look over the lively, tossing blue waves for a mile or more eastward and northward, our eyes fall on these shining russet hills, and Ball's Hill appears in this strong light at the verge of this undulating blue plain, like some glorious newly created island of the spring, just sprung up from the bottom in the midst of the blue waters. The fawn-colored oak leaves, with a few pines intermixed, thickly covering the hill, look not like a withered vegetation, but an ethereal kind, just expanded and peculiarly adapted to the season and the sky.

Look toward the sun, the water is yellow, as water in which the earth has just washed itself clean of its winter impurities; look from the sun and it is a beautiful dark blue; but in each direction the crests of the waves are white, and you cannot sail or row over this watery wilderness without sharing the excitement of this element. Our sail draws so strongly that we cut through the great waves without feeling them. And all around, half a mile or a mile distant, looking over this blue foreground, I see the bare and peculiarly neat, clean-washed, and bright russet hills reflecting the bright light (after the storm of yesterday) from an infinite number of dry blades of withered grass. The russet

surfaces have now, as it were, a combed look, — combed by the rain. And the leather-color of withered oak leaves covering Ball's Hill, seen a mile or two off in the strong light, with a few pines intermixed, as if it were an island rising out of this blue sea in the horizon. This sight affects me as if it were visible at this season only. What with the clear air and the blue water and the sight of the pure dry withered leaves, that distant hill affects me as something altogether ethereal.

After a day of soaking rain, concluded with a double rainbow the evening before, — not to mention the rain of the evening, — go out into the sparkling spring air, embark on the flood of melted snow and of rain gathered from all hillsides, with a northwest wind in which you often find it hard to stand up straight, and toss upon a sea of which one half is liquid clay, the other liquid indigo, and look round on an earth dressed in a homespun of pale sheeny brown and leather-color. Such are the blessed and fairy isles we sail to!

We meet one great gull beating up the course of the river against the wind, at Flint's Bridge. (One says they were seen about a week ago, but there was very little water then.) Its is a very leisurely sort of limping flight, tacking its way along like a sailing vessel, yet the slow security with which it advances suggests a leisurely contemplativeness in the bird, as if it were working out some problem quite at its leisure. As often as its very narrow, long, and curved wings are lifted up against the light, I see a very narrow distinct light edging to the wing where it is thin. Its black-tipped wings. Afterwards, from Ball's Hill, looking

north, I see two more circling about looking for food over the ice and water.

There is an unexpected quantity of ice in that direction, not on the channel, but the meadows east of it, all the way from Ball's Hill to Carlisle Bridge, — large masses, which have drifted from the channel and from above, for there the wind has blown more directly across the river. These great masses have been driven and wedged one against another, and ground up on the edges. This first sight of the bare tawny and russet earth, seen afar, perhaps, over the meadow flood in the spring, affects me as the first glimpse of land, his native land, does the voyager who has not seen it a long time. But in a week or two we get used to it.

I look down over Tarbell's Bay, just north of Ball's Hill. Not only meadows but potato and rye fields are buried deep, and you see there, sheltered by the hills on the northwest, a placid blue bay having the russet hills for shores. This kind of bay, or lake, made by the freshet — these deep and narrow "fiords" — can only be seen along such a stream as this, liable to an annual freshet. The water rests as gently as a dewdrop on a leaf, laving its tender temporary shores. It has no strand, leaves no permanent water-mark, but though you look at it a quarter of a mile off, you know that the rising flood is gently overflowing a myriad withered green blades there in succession. There is the magic of lakes that come and go. The lake or bay is not an institution, but a phenomenon. You plainly see that it is so much water poured into the hollows of the earth

March 17. 6.30 A. M. — River risen still higher. It is seven and a half inches below the highest part of the truss and about fifteen and a half inches below the middle of the lower stone step of the railroad. It is not quite over Wood's road.

I hear a robin fairly singing.

A great many musquash have been killed within a week. One says a cartload have been killed in Assabet. Perhaps a dozen gunners have been out in this town every day. They get a shilling apiece for their skins. One man getting musquash and one mink earned five or six dollars the other day. I hear their guns early and late long before sunrise and after sunset, for those are the best times.

P. M. — To Flint's Bridge by water.

The water is very high, and smooth as ever it is. It is very warm. I wear but one coat on the water. The town and the land it is built on seem to rise but little above the flood. This bright smooth and level surface seems here the prevailing element, as if the distant town were an island. I realize how water predominates on the surface of the globe. I am surprised to see new and unexpected water-lines, drawn by the level edge of the flood about knolls in the meadows and in the woods, — waving lines, rarely if ever recognized or thought of by the walker or any, which mark the boundary of a possible or probable freshet any spring.[1] Even if the highest water-mark were indicated at one point, the surveyor could not, with any labor short of infinite, draw these lines for us which

[1] [Channing, pp. 294, 295.]

wind about every elevation of earth or rock. Yet, though this slight difference of level which the water so simply and effectually points out, is so unobservable by us ordinarily, no doubt Nature never forgets it for a moment, but plants grow and insects, etc., breed in conformity to it. Many a kingdom of nature has its boundaries parallel with this waving line. By these freshets, the relation of some field, usually far from the stream, to future or past deluge is suggested. I am surprised and amused, at least, to walk in such a field and observe the nice distinctions which the great water-level makes there. So plants and animals and thoughts have their commonly unseen shores, and many portions of the earth are, with reference to them, islands or peninsulas or capes, shores or mountains.

We are stiff and set in our geography because the level of water is comparatively, or within short periods, unchangeable. We look only in the sea for islands and continents and their varieties. But there are more subtle and invisible and fluctuating floods which island this or that part of the earth whose geography has never been mapped. For instance, here is Mantatuket Rock, commonly a rocky peninsula with a low or swampy neck and all covered with wood. It is now a small rocky island, and not only the swampy neck but a considerable portion of the upland is blotted out by the flood, covered and concealed under water; and what surprises me is that the water should so instantly know and select its own shore on the upland, though I could not have told with my eye whether it

would be thirty feet this way or as many that. A distinction is made for me by the water in this case which I had never thought of, revealing the relation of this surface to the flood ordinarily far from it, and which I now begin to perceive that every tree and shrub and herbaceous plant growing there knew, if I did not.

How different to-day from yesterday! Yesterday was a cool, bright day, the earth just washed bare by the rain, and a strong northwest wind raised respectable billows on our vernal seas and imparted remarkable life and spirit to the scene. To-day it is perfectly still and warm. Not a ripple disturbs the surface of these lakes, but every insect, every small black beetle struggling on it, is betrayed; but, seen through this air, though many might not notice the difference, the russet surface of the earth does not shine, is not bright. I see no *shining* russet islands with dry but flushing oak leaves. The air is comparatively dead when I attend to it, and it is as if there were the veil of a fine mist over all objects, dulling their edges. Yet this would be called a clear day. These aerial differences in the days are not commonly appreciated, though they affect our spirits.

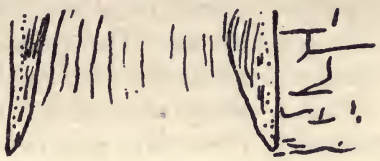
When I am opposite the end of the willow-row, seeing the osiers of perhaps two years old all in a mass, they are seen to be very distinctly yellowish beneath and scarlet above. They are fifty rods off. Here is the same chemistry that colors the leaf or fruit, coloring the bark. It is generally, probably always, the upper part of the twig, the more recent growth, that is the

higher-colored and more flower or fruit like. So leaves are more ethereal the higher up and further from the root. In the bark of the twigs, indeed, is the more permanent flower or fruit. The flower falls in spring or summer, the fruit and leaves fall or wither in autumn, but the blushing twigs retain their color throughout the winter and appear more brilliant than ever the succeeding spring. They are winter fruit. It adds greatly to the pleasure of late November, of winter, or of early spring walks to look into these mazes of twigs of different colors.

As I float by the Rock, I hear rustling amid the oak leaves above that new water-line, and, there being no wind, I know it to be a striped squirrel, and soon see its long-unseen striped sides flirting about the instep of an oak. Its lateral stripes, alternate black and yellowish, are a type which I have not seen for a long time, or rather a punctuation-mark, the character to indicate where a new paragraph commences in the revolution of the seasons. Double lines.

I find by measurement that there is from two to three inches fall in the middle between the piers of Flint's Bridge, on the two sides of the bridge, supposing the planking to be level; but there is much more close to the abutments, for the water is very conspicuously heaped up in the middle in each case, or between each two piers, thus: —

If you look from above, it is somewhat thus: —



If I land now on any knoll which is left dry above the flood, an island in the meadow, and its surface is broken, I am pretty sure to find Indian relics. They pitched their wigwams on these highest places, near water.

I was speaking yesterday of the peculiarity of our meadow-bays in time of flood, — a shore where there are no shore-marks; for in time trees, rocks, etc., arrange themselves parallel with the water's edge, and the water by its washing makes for itself a strand, washing out the soil from the bank and leaving the sand and stones, and paths of animals and men conform to the permanent shore, but in this case all is abrupt and surprising. Rocky islands covered with green lichens and with polypody half submerged rise directly from the water, and trees stand up to their middles in it. Any eye would perceive that a rock covered with green lichens quite down to the water's edge was something unusual.

March 18. 8 A. M. — To stone bridge.

The water has fallen three or four inches. It was at its height last night, and was then about five inches below the highest part of the truss. This is quite high water. But it has now begun to rain, and the river will probably rise again.

Along the shores you see now much coarse wrack

of green and black pontederia stems which have been torn up by the ice. The ice and the wrack are also dotted with cranberries here and there.

What a variety of weather! What a difference in the days! Three days ago, the 15th, we had steady rain with a southerly wind, with a clear interval and a brilliant double rainbow at sunset, — a day when all the russet banks were dripping, saturated with wet, and the peep of the robin was heard through the drizzle and the rain. In the evening it rained again much harder than before. The next day it was clear and cool, with a strong northwest wind, and the flood still higher on the meadows; the dry russet earth and leather-colored oak reflected a flashing light from far; the tossing blue waves with white crests excited the beholder and the sailer. In short, the tables were completely turned; snow and ice were for the most part washed and blown away from both land and water. Yesterday it was very warm, without perceptible wind, with a comparatively lifeless [air], yet such as invalids like, with no flashing surfaces, but, as it were, an invisible mist sobering down every surface; and the water, still higher than before, was perfectly smooth all day. This was a weather-breeder. To-day comes a still, steady rain again, with warm weather and a southerly wind, which threatens to raise the river still higher, though it had begun to fall.[1]

One would say that frost in the ground, though it may be melted for several inches (as now), bred rain, if, indeed, its evaporations do not create it. Expect

[1] *Vide* [p. 65].

rain after rain till the frost is completely out. The melted frost, rising in the form of vapor, returns, perhaps, in rain to liberate its kind still imprisoned in the earth.

Consider how I discovered where the Winthrop family in this town placed their front door some two hundred years ago, without any verbal or written or ocular evidence. I first suspected [?] and then verified it. I, with others, saw by the frame of the old Hunt house that an addition had been made to its west end in 1703. This brought the front door, which was in the middle of the present, near one end of the original or Winthrop house. I, sitting at home, said to myself, having an occult sympathy with the Winthrops of that date, "The front door must originally have been in the middle of the old house, for symmetry and convenience required it, and if it was, I shall find traces of it; I shall find there where studs have been set into the frame in a different manner from the rest." I went to the house and looked where the door should have been, and I found precisely the evidence I sought, and, beside, where the timber above had been cut out just the width of the door. Indeed, if I had found no traces of the old door, I should have known that the present door was placed where it is after the house was built, for at this corner of the house the end of the sill chanced to be nearly round, the stick tapering, and the post was fitted upon [it] in a remarkable manner, thus:

Oak wood had been thus laboriously fitted to it, but within three feet of the corner this sill had been wholly cut away under the

door to make room for it, for they certainly had not put in a piece of sill only three feet long and *of that form* there originally.

Flood, who is saving rails, etc., at the stone bridge, remarks that old settlers say this stream is highest the third day after a rain. But of course this depends on the amount of the rain, the direction and force of the wind, etc., etc. A southwest wind will take the water out sooner, and any strong wind will evaporate it fast.

Rice thinks that he has seen two gulls on the Sudbury meadows, — the white and the gray gulls. He has often seen a man shoot the large gull from Cambridge bridge by heading him off, for the gull flies slowly. He would first run this way, and when the gull turned aside, run that, till the gull passed right over his head, when he shot him. Rice saw Fair Haven Pond still covered with ice, though open along the shore, yesterday. I frequently see the gulls flying up the course of the stream, or of the river valley, at least. R. thinks that the ducks will be seen more numerous, gathering on our waters, just before a storm, like yesterday's.

March 19. 7 A. M. — Fair weather and a very strong southwest wind, the water not quite so high as day before yesterday, — just about as high as yesterday morning, — notwithstanding yesterday's rain, which was pretty copious.

P. M. — To Tarbell's *via* J. P. Brown's.

The wind blows very strongly from the southwest, and, the course of the river being northeast, it must help the water to run off very much. If it blew with

equal violence from the north, the river would probably have risen on account of yesterday's rain. On the northeast sides of the broadest expanses the waves run very high, quite sea-like, and their tumult is exciting both [to] see and [to] hear. All sorts of lumber is afloat. Rails, planks, and timber, etc., which the unthrifty neglected to secure now change hands. Much railroad lumber is floated off. While one end rests on the land, it is the railroad's, but as soon as it is afloat it is made the property of him who saves it. I see some poor neighbors as earnest as the railroad employees are negligent, to secure it. It blows so hard that you walk aslant against the wind. Your very beard, if you wear a full one, is a serious cause of detention. Or if you are fortunate enough to go before the wind, your carriage can hardly be said to be natural to you.

A new ravine has begun at Clamshell this spring. That other, which began with a crack in the frozen ground, I stood at the head of and looked down and out through the other day. It not only was itself a new feature in the landscape, but it gave to the landscape seen through [it] a new and remarkable character, as does the Deep Cut on the railroad. It faces the water, and you look down on the shore and the flooded meadows between its two sloping sides as between the frame of a picture. It affected me like the descriptions or representations of much more stupendous scenery, and to my eyes the dimensions of this ravine were quite indefinite, and in that mood I could not have guessed if it were twenty or fifty feet wide. The landscape has a strange and picturesque appearance seen through

it, and it is itself no mean feature in it. But a short time ago I detected here a crack in the frozen ground. Now I look with delight as it were at a new landscape through a broad gap in the hill.

Walking afterward on the side of the hill behind Abel Hosmer's, overlooking the russet interval, the ground being bare where corn was cultivated last year, I see that the sandy soil has been washed far down the hill for its whole length by the recent rains combined with the melting snow, and it forms on the nearly level ground at the base very distinct flat yellow sands, with a convex edge, contrasting with the darker soil there.

Such slopes must lose a great deal of this soil in a single spring, and I should think that was a sound reason in many cases for leaving them woodland and never exposing and breaking the surface. This, plainly, is one reason why the brows of such hills are commonly so barren. They lose much more than they gain annually. It is a question whether the farmer will not lose more by the wash in such cases than he will gain by manuring.

The meadows are all in commotion. The ducks are now concealed by the waves, if there are any floating there. While the sun is behind a cloud, the surface of

the flood is almost uniformly yellowish or blue, but when the sun comes out from behind the cloud, a myriad dazzling white crests to the waves are seen. The wind makes such a din about your ears that conversation is difficult; your words are blown away and do not strike the ear they were aimed at. If you walk by the water, the tumult of the waves confuses you. If you go by a tree or enter the woods, the din is yet greater. Nevertheless this universal commotion is very interesting and exciting. The white pines in the horizon, either single trees or whole woods, a mile off in the southwest or west, are particularly interesting. You not only see the regular bilateral form of the tree, all the branches distinct like the frond of a fern or a feather (for the pine, even at this distance, has not merely beauty of outline and color, — it is not merely an amorphous and homogeneous or continuous mass of green, — but shows a regular succession of flattish leafy boughs or stages, in flakes one above another, like the veins of a leaf or the leafets of a frond; it is this richness and symmetry of detail which, more than its outline, charms us), but that fine silvery light reflected from its needles (perhaps their under sides) incessantly in motion. As a tree bends and waves like a feather in the gale, I see it alternately dark and light, as the sides of the needles, which reflect the cool sheen, are alternately withdrawn from and restored to the proper angle,[1] and the light appears to flash upward from the base of the tree incessantly. In the intervals of the flash it is often as if the tree were withdrawn

[1] [Channing, p. 296.]

altogether from sight. I see one large pine wood over whose whole top these cold electric flashes are incessantly passing off harmlessly into the air above. I thought at first of some fine spray dashed upward, but it is rather like broad flashes of pale, cold light. Surely you can never see a pine wood so expressive, so speaking. This reflection of light from the waving crests of the earth is like the play and flashing of electricity. No deciduous tree exhibits these fine effects of light. Literally incessant sheets, not of heat- but cold-lightning, you would say were flashing there. Seeing some just over the roof of a house which was far on this side, I thought at first that it was something like smoke even — though a rare kind of smoke — that went up from the house. In short, you see a play of light over the whole pine, similar in its cause, but far grander in its effects, than that seen in a waving field of grain. Is not this wind an awaking to life and light [of] the pines after their winter slumber? The wind is making passes over them, magnetizing and electrifying them. Seen at midday, even, it is still the light of dewy morning alone that is reflected from the needles of the pine. This is the brightening and awakening of the pines, a phenomenon perchance connected with the flow of sap in them. I feel somewhat like the young Astyanax at sight of his father's flashing crest.[1] As if in this wind-storm of March a certain electricity was passing from heaven to earth through the pines and calling them to life.

That first general exposure of the russet earth, March

[1] [Channing, p. 296.]

16th, after the soaking rain of the day before, which washed off most of the snow and ice, is a remarkable era in an ordinary spring. The earth casting off her white mantle and appearing in her homely russet garb. This russet — including the leather-color of oak leaves — is peculiar and not like the russet of the fall and winter, for it reflects the spring light or sun, as if there were a sort of sap in it. When the strong northwest winds first blow, drying up the superabundant moisture, the withered grass and leaves do not present a merely weather-beaten appearance, but a washed and combed springlike face. The knolls forming islands in our meadowy flood are never more interesting than then. This is when the earth is, as it were, re-created, raised up to the sun, which was buried under snow and ice.

To continue the account of the weather [seven] pages back: To-day it has cleared off to a very strong southwest wind, which began last evening, after the rain, — strong as ever blows all day, stronger than the northwest wind of the 16th and hardly so warm, with flitting wind-clouds only. It differs from the 16th in being yet drier and barer, — the earth, — scarcely any snow or ice to be found, and, such being the direction of the wind, you can hardly find a place in the afternoon which is both sunny and sheltered from the wind, and there is a yet greater commotion in the water.

We are interested in the phenomena of Nature mainly as children are, or as we are in games of chance. They are more or less exciting. Our appetite for novelty is insatiable. We do not attend to ordinary things, though they are most important, but to extraordinary ones.

While it is only moderately hot or cold, or wet or dry, nobody attends to it, but when Nature goes to an extreme in any of these directions we are all on the alert with excitement. Not that we care about the philosophy or the effects of this phenomenon. *E. g.*, when I went to Boston in the early train the coldest morning of last winter, two topics mainly occupied the attention of the passengers, Morphy's chess victories and Nature's victorious cold that morning. The inhabitants of various towns were comparing notes, and that one whose door opened upon a greater degree of cold than any of his neighbors' doors chuckled not a little. Almost every one I met asked me almost before our salutations were over "how the glass stood" at my house or in my town, — the librarian of the college, the registrar of deeds at Cambridgeport, — a total stranger to me, whose form of inquiry made me think of another sort of glass, — and each rubbed his hands with pretended horror but real delight if I named a higher figure than he had yet heard. It was plain that one object which the cold was given us for was our amusement, a passing excitement. It would be perfectly consistent and American to bet on the coldness of our respective towns, of [*sic*] the morning that is to come. Thus a greater degree of cold may be said to warm us more than a less one. We hear with ill-concealed disgust the figures reported from some localities, where they never enjoy the luxury of severe cold. This is a perfectly legitimate amusement, only we should know that each day is peculiar and has its kindred excitements.

In those wet days like the 12th and the 15th when the browns culminated, the sun being concealed, I was drawn toward and worshipped the brownish light in the sod, — the withered grass, etc., on barren hills. I felt as if I could eat the very crust of the earth; I never felt so terrene, never sympathized so with the surface of the earth. From whatever source the light and heat come, thither we look with love.

The newspapers state that a man in Connecticut lately shot ninety-three musquash in one day.

Melvin says that in skinning a mink you must cut round the parts containing the musk, else the operation will be an offensive one; that Wetherbee has already baited some pigeons (he hears); that he last year found a hen-hawk's egg in March and thinks that woodcocks are now laying.

March 20. 7 A. M. — River no higher than three days ago, notwithstanding the rain of two days ago, the wind being southwest and very strong.

P. M. — I see under the east side of the house amid the evergreens, where they were sheltered from the cold northwest wind, quite a parcel of sparrows, chiefly *F. hyemalis*, two or three tree sparrows, and one song sparrow, quietly feeding together. I watch them through a window within six or eight feet. They evidently love to be sheltered from the wind, and at least are not averse to each other's society. The tree sparrows *sing* a little. One perches on a bush to sing, while others are feeding on the ground, but he is very restless on his perch, hopping about and stooping as if dodging

those that fly over. He must perch on some bit of stubble or twig to sing. They are evidently picking up the seeds of weeds which lie on the surface of the ground invisible to our eyes. They suffer their wings to hang rather loose. The *F. hyemalis* is the largest of the three. They have remarkably distinct light-colored bills, and when they stretch, show very distinct clear-white lateral tail-feathers. This stretching seems to be contagious among them, like yawning with us. They have considerable brown on the quill-feathers. The tree sparrows are much brighter brown and white than the song sparrow. The latter alone scratches once or twice, and is more inclined to hop or creep close to the ground, under the fallen weeds. Perhaps it deserves most to be called the *ground*-bird.

P. M. — Up Assabet. Very strong northwest wind.

When I get opposite the end of the willow-row, the sun comes out and they are very handsome, like a rosette, pale-tawny or fawn-colored at base and a rich yellow or orange yellow in the upper three or four feet.

This is, methinks, the brightest object in the landscape these days. Nothing so betrays the spring sun. I am aware that the sun has come out of a cloud first by seeing it lighting up the osiers. Such a willow-row, cut off within a year or two, might be called a heliometer, or measure of the sun's brightness.

The last year's shoots of many trees — as maples, both white and red — retain a permanent bright color, red or scarlet, all winter and spring, till new ones

grow. The top of the forest is thus very agreeably tinged.

The river is so high that I leave it at Pinxter Swamp, and come into it again only at the swift narrow place above, near the road.

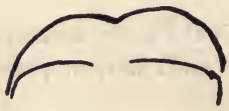
March 21. 6 A. M. — The water has fairly begun to fall. It was at its height the 17th; fell a little — two or three inches — the morning of the 18th. On the 18th it rained very considerably all day, which would ordinarily have raised the river a foot, or perhaps two, but, the wind being very strong from the southwest, it only prevented its falling any more until this morning. It did not probably raise it more than two inches. Of course, there could not have been much melted snow and ice to be added to the last rain about the sources of the river, since they are considerably further south, where the ground must have been much more bare than here.

A crow blackbird.

P. M. — Sail to Fair Haven Pond.

A strong northwest wind. Draw my boat over the road on a roller. Raising a stone for ballast from the south side of the railroad causeway, where it is quite sunny and warm, I find the under sides very densely covered with little ants, all stirring and evidently ready to come out, if some have not already. They feel the heat through the stone on the ground. It blowed very smartly in gusts, and my boat scud along this way and that, not minding its helm much, as if it were lifted partly out of water. I went from point to point as quickly as you could say "here" and "there."

I see a female marsh hawk sailing and hunting over Potter's Swamp. I not only see the white rump but the very peculiar crescent-shaped curve of its wings.



Fair Haven Pond is only two thirds open. The east end is frozen still, and the body of the ice has drifted in to shore a rod or two, before the northwest wind, and its edge crumbled against the trees.

I see, on a yellow lily root washed up, leaf-buds grown five or six inches, or even seven or eight, with the stems.

Everywhere for several days the alder catkins have dangled long and loose, the most alive apparently of any tree. They seem to welcome the water which half covers them. The willow catkins are also very conspicuous, in silvery masses rising above the flood.

I see several white pine cones in the path by Wheildon's which appear to have fallen in the late strong winds, but perhaps the ice in the winter took them off. Others still hold on.

From the evening of March 18th to this, the evening of the 21st, we have had uninterrupted strong wind, — till the evening of the 19th very strong southwest wind, then and since northwest, — three days of strong wind.

March 22. P. M. — The wind changes to easterly and is more raw, *i. e.* cool and moist, and the air thickens as if it would rain.

Returning from Poplar Hill through the west end of Sleepy Hollow, it is very still, the air thick, just ready

to rain, and I hear there, on the apple trees and small oaks, the tree sparrows and hyemalis singing very pleasantly. I hear the lively jingle of the hyemalis and the sweet notes of the tree sparrow, canary-like, — *svar svar, svit vit vit vit vit,* the last part with increasing rapidity. Both species in considerable numbers, singing together as they flit along, make a very lively concert. They sing as loud and full as ever now. There has been no sweeter warble than this of the tree sparrow as yet.

It is a peculiarly still hour now, when the first drops of rain begin to be heard on the dry leaves around me, and, looking up, I see very high in the air two large birds, which, at that height, with their narrow wings, flying southeast, looked, *i. e.* were shaped, like nighthawks. I think they were gulls.

The great scarlet oak has now lost almost every leaf, while the white oak near it still retains them.

C. says he saw fox-colored sparrows this afternoon.

March 23. P. M. — Walk to Cardinal Shore and sail to Well Meadow and Lee's Cliff.

It clears up at 2 P. M.

The *Lycoperdon stellatum* are numerous and blossomed out widely in Potter's Path by Bare Hill, after the rain of the night.

As we sail upward toward the pond, we scare up two or three golden-eyes, or whistlers, showing their large black heads and black backs, and afterward I watch one swimming not far before us and see the white spot, amid the black, on the side of his head. I have

now no doubt that I saw some on the 21st flying here, and it is very likely that Rice saw them here on the 17th, as he says.

The pond may be said to be open to-day. There is, however, quite a large mass of ice, which has drifted, since the east wind arose yesterday noon, from the east side over to the north of the Island. This ice, of which there may be eight or ten acres, is so very dark, almost black, that it is hard to discern till you are just upon it, though some little pieces which we broke off and left on its edge were very visible for half a mile. When at the edge of this field of ice, it was a very dark gray in color, had none of the usual whiteness of ice. It was about six inches thick, but was most completely honeycombed. The upper surface was not only thus dark, dusky, or blackish, but full of little hollows three to six inches across, and the whole mass undulated with the waves very much, irregular cracks alternately opening and closing in it, yet it was well knitted together. With my paddle I could depress it six inches on the edge, and cause it to undulate like a blanket for a rod or more, and yet it bore us securely when we stepped out upon it, and it was by no means easy to break off or detach a piece a foot wide. In short, it was thoroughly honeycombed and, as it were, saturated with water. The masses broken off reminded me of some very decayed and worm-eaten interiors of trees. Yet the small cakes into which it visibly cracked when you bent it and made it undulate were knitted together or dovetailed somewhat like the plates of a tortoise-shell, and immediately returned to their places.

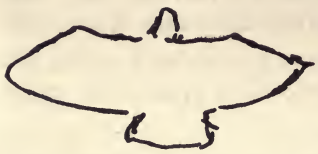
Though it would bear you, the creaking of one such part on another was a quite general and considerable noise, and one detached mass, rubbed in your hand upon the edge of the field, yielded a singular metallic or ringing sound, evidently owing to its hollowness or innumerable perforations. It had a metallic ring. The moment you raised a mass from the water, it was very distinctly white and brilliant, the water running out from it. This was the relic of that great mass which I saw on the 21st on the east side.

There was a great quantity of bayonet rush, also, drifted over here and strewn along the shore. This and the pontederia are the coarsest of the wrack. Now is the time, then, that it is added to the wrack, probably being ripped up by the ice. It reminds you of the collections of seaweed after a storm, — this river-weed after the spring freshets have melted and dispersed the ice. The ice thus helps essentially to clear the shore.

I am surprised to see one of those sluggish ghost-horses alive on the ice. It was probably drifted from the shore by the flood and here lodged.

That dark, uneven ice has a peculiarly coarse-grained appearance, it is so much decomposed. The pieces are interlocked by the irregularities of the perpendicular combing. The under side presents the most continuous surface, and it is held together chiefly on that side. One piece rings when struck on another, like a trowel on a brick, and as we rested against the edge of this ice, we heard a singular wheezing and grating sound, which was the creaking of the ice, which was undulating under the waves and wind.

As we entered Well Meadow, we saw a hen-hawk perch on the topmost plume of one of the tall pines at the head of the meadow. Soon another appeared, probably its mate, but we looked in vain for a nest there. It was a fine sight, their soaring above our heads, presenting a perfect outline and, as they came round, showing their rust-colored tails with a whitish rump, or, as they sailed away from us, that slight teetering or quivering motion of their dark-tipped wings seen edgewise, now on this side, now that, by which they balanced and directed themselves. These are the most eagle-like of our common hawks. They very commonly perch upon the very topmost plume of a pine, and, if motionless, are rather hard to distinguish there.



The cowslip and most of the skunk-cabbage there have been and are still drowned by flood; else we should find more in bloom. As it is, I see the skunk-cabbage in bloom, but generally the growth of both has been completely checked by the water.

While reconnoitring there, we hear the peep of one hylodes somewhere in this sheltered recess in the woods. And afterward, on the Lee side, I hear a single croak from a wood frog.

We cross to Lee's shore and sit upon the bare rocky ridge overlooking the flood southwest and northeast. It is quite sunny and sufficiently warm. I see one or two of the small fuzzy gnats in the air. The prospect thence is a fine one, especially at this season, when the water

is high. The landscape is very agreeably diversified with hill and vale and meadow and cliff. As we look southwest, how attractive the shores of russet capes and peninsulas laved by the flood! Indeed, that large tract east of the bridge is now an island. How fair that low, undulating russet land! At this season and under these circumstances, the sun just come out and the flood high around it, russet, so reflecting the light of the sun, appears to me the most agreeable of colors, and I begin to dream of a russet fairyland and elysium. How dark and terrene must be green! but this smooth russet surface reflects almost all the light. That broad and low but firm island, with but few trees to conceal the contour of the ground and its outline, with its fine russet sward, firm and soft as velvet, reflecting so much light, — all the undulations of the earth, its nerves and muscles, revealed by the light and shade, and even the sharper ridgy edge of steep banks where the plow has heaped up the earth from year to year, — this is a sort of fairyland and elysium to my eye. The tawny couchant island! Dry land for the Indian's wigwam in the spring, and still strewn with his arrow-points. The sight of such land reminds me of the pleasant spring days in which I have walked over such tracts, looking for these relics. How well, too, this smooth, firm, light-reflecting, tawny earth contrasts with the darker water which surrounds it, — or perchance lighter sometimes! At this season, when the russet colors prevail, the contrast of water and land is more agreeable to behold. What an inexpressibly soft curving line is the shore! Or if the water is perfectly smooth and

yet rising, you seem to see it raised an eighth of an inch with swelling lip above the immediate shore it kisses, as in a cup or the of [*sic*] a saucer. Indian isles and promontories. Thus we sit on that rock, hear the first wood frog's croak, and dream of a russet elysium. Enough for the season is the beauty thereof. Spring has a beauty of its own which we would not exchange for that of summer, and at this moment, if I imagine the fairest earth I can, it is still russet, such is the color of its blessed isles, and they are surrounded with the phenomena of spring.

The qualities of the land that are most attractive to our eyes now are dryness and firmness. It is not the rich black soil, but warm and sandy hills and plains which tempt our steps. We love to sit on and walk over sandy tracts in the spring like cicindelas. These tongues of russet land tapering and sloping into the flood do almost speak to one. They are alternately in sun and shade. When the cloud is passed, and they reflect their pale-brown light to me, I am tempted to go to them.

I think I have already noticed within a week how very agreeably and strongly the green of small pines contrasts with the russet of a hillside pasture now. Perhaps there is no color with which green contrasts more strongly.

I see the shadow of a cloud — and it chances to be a hollow ring with sunlight in its midst — passing over the hilly sprout-land toward the Baker house, a sprout-land of oaks and birches; and, owing to the color of the birch twigs, perhaps, this shadow turns all from

russet to a decided dark-purplish color as it moves along. And then, as I look further along eastward in the horizon, I am surprised to see strong purple and violet tinges in the sun, from a hillside a mile off densely covered with full-grown birches. It is the steep old corn-field hillside of Jacob Baker's. I would not have believed that under the spring sun so many colors were brought out. It is not the willows only that shine, but, under favorable circumstances, many other twigs, even a mile or two off. The dense birches, so far that their white stems are not distinct, reflect deep, strong purple and violet colors from the distant hillsides opposite to the sun. Can this have to do with the sap flowing in them?

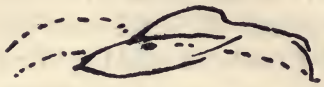
As we sit there, we see coming, swift and straight, northeast along the river valley, not seeing us and therefore not changing his course, a male goosander, so near that the green reflections of his head and neck are plainly visible. He looks like a paddle-wheel steamer, so oddly painted up, black and white and green, and moves along swift and straight like one. Ere long the same returns with his mate, the red-throated, the male taking the lead.

The loud *peop* (?) of a pigeon woodpecker is heard in our sea [?], and anon the prolonged loud and shrill *cackle*, calling the thin-wooded hillsides and pastures to life. It is like the note of an alarm-clock set last fall so as to wake Nature up at exactly this date. *Up up up up up up up up up!* What a rustling it seems to make among the dry leaves!

You can now sit on sunny sheltered sprout-land

hillsides and enjoy the sight and sound of rustling dry leaves.

Then I see come slowly flying from the southwest



a great gull, of voracious form, which at length by a sudden and steep descent alights in Fair Haven Pond, scaring up a crow which was seeking its food on the edge of the ice. This shows that the crows get along the meadow's edge also what has washed up.

It is suggested that the blue is darkest when reflected from the most agitated water, because of the shadow (occasioned by the inequalities) mingled with it.

Some Indians of the north have but one word for blue and black, and blue is with us considered the darkest color, though it is the color of the sky or air. Light, I should say, was white; the absence of it, black. Hold up to the light a perfectly opaque body and you get black, but hold up to it the least opaque body, such as air, and you get blue. Hence you may say that blue is light seen through a veil.

March 24. P. M. — Down railroad.

Southeast wind. Begins to sprinkle while I am sitting in Laurel Glen, listening to hear the earliest wood frogs croaking. I think they get under weigh a little earlier, *i. e.*, you will hear many of them sooner than you will hear many hylodes. Now, when the leaves get to be dry and rustle under your feet, dried by the March winds, the peculiar dry note, *wurrk wurrk wur-r-r-k wurk* of the wood frog is heard faintly by ears on the

alert, borne up from some unseen pool in a woodland hollow which is open to the influences of the sun. It is a singular sound for awakening Nature to make, associated with the first warmer days, when you sit in some sheltered place in the woods amid the dried leaves. How moderate on her first awakening, how little demonstrative ! You may sit half an hour before you will hear another. You doubt if the season will be long enough for such Oriental and luxurious slowness. But they get on, nevertheless, and by to-morrow, or in a day or two, they croak louder and more frequently. Can you ever be sure that you have heard the very first wood frog in the township croak? Ah! how weather-wise must he be! There is no guessing at the weather with him. He makes the weather in his degree; he encourages it to be mild. The weather, what is it but the temperament of the earth? and he is wholly of the earth, sensitive as its skin in which he lives and of which he is a part. His life relaxes with the thawing ground. He pitches and tunes his voice to chord with the rustling leaves which the March wind has dried. Long before the frost is quite out, he feels the influence of the spring rains and the warmer days. His is the very voice of the weather. He rises and falls like quicksilver in the thermometer. You do not perceive the spring so surely in the actions of men, their lives are so artificial. They may make more fire or less in their parlors, and their feelings accordingly are not good thermometers. The frog far away in the wood, that burns no coal nor wood, perceives more surely the general and universal changes.

In the ditch under the west edge of Trillium Wood I see six yellow-spot turtles. They surely have not crawled from far. Do they go into the mud in this ditch? A part of the otherwise perfectly sound and fresh-looking scales of one has been apparently eaten away, as if by a worm.

There sits also on the bank of the ditch a *Rana fontinalis*, and it is altogether likely they were this species that leaped into a ditch on the 10th. This one is mainly a bronze brown, with a very dark greenish snout, etc., with the raised line down the side of the back. This, methinks, is about the only frog which the marsh hawk could have found hitherto.

Returning, above the railroad causeway, I see a flock of goldfinches, first of *spring*, flitting along the causeway-bank. They have not yet the bright plumage they will have, but in some lights might be mistaken for sparrows. There is considerable difference in color between one and another, but the flaps of their coats are black, and their heads and shoulders more or less yellow. They are eating the seeds of the mullein and the large primrose, clinging to the plants sidewise in various positions and pecking at the seed-vessels. Wilson says, "In the month of April they begin to change their winter dress, and, before the middle of May, appear in brilliant yellow."

C. sees geese go over again this afternoon. How commonly they are seen in still rainy weather like this! He says that when they had got far off they looked like a black ribbon almost perpendicular waving in the air.

March 25. A rainy day.

P. M. — To Clamshell.

I heard the *what what what what* of the nuthatch this forenoon. Do I ever hear it in the afternoon? It is much like the cackle of the pigeon woodpecker and suggests a relation to that bird.

Again I walk in the rain and see the rich yellowish browns of the moist banks. These Clamshell hills and neighboring promontories, though it is a dark and rainy day, reflect a certain yellowish light from the wet withered grass which is very grateful to my eyes, as also the darker more reddish browns, as the radical leaves of the *Andropogon scoparius* in low tufts here and there. (Its culms, where they stand, are quite light yellow.) Surely russet is not the name which describes the fields and hillsides now, whether wet or dry. There is not red enough in it. I do not know a better name for this (when wet) yellowish brown than "tawny." On the south side of these warm hills, it may perhaps be called one of the fawn-colors, *i. e.* brown inclining to green. Much of this peculiar yellowish color on the surface of the Clamshell plain is due to a little curled sedge or grass growing at short intervals, loosely covering the ground (with green mosses intermixed) in little tufts like curled hair.

I saw yesterday, in Laurel Glen, where the early sedge had been grazed very close to the ground, and the same, perhaps digested, fine as green-paint dust, lay around. Was it the work of a mouse?

Day before yesterday, in clear, dry weather, we had

pale-brown or fawn-colored earth, *i. e.*, a dry, withered grass blade [color]; to-day, a more yellow brown or tawny, the same being wet. The wet brings out an agreeable yellow light, as if the sun were shining through a mist on it. The earth is more truly russet in November, when there is more redness left in the withered and withering vegetation. Such is the change in the color of the bare portions of the earth (*i. e.* bare of trees and bushes) produced by rain. Also the oak leaves are much redder. In fair weather the light color of these objects was simply a light reflected from them, originating in the sun and sky; now it is a more proper and inward light, which attracts and confines our attention to moist sward itself.

A snipe flies away from the moist Clamshell shore, uttering its *cr-a-ack c-r-r-rack.*

I thought the other day, How we enjoy a warm and pleasant day at this season! We dance like gnats in the sun.

A score of my townsmen have been shooting and trapping musquash and mink of late. Some have got nothing else to do. If they should strike for higher wages now, instead of going to the clam-banks, as the Lynn shoemakers propose, they would go to shooting musquash. They are gone all day; early and late they scan the rising tide; stealthily they set their traps in remote swamps, avoiding one another. Am not I a trapper too, early and late scanning the rising flood, ranging by distant wood-sides, setting my traps in solitude, and baiting them as well as I know how, that I may catch life and light, that my intellectual part

may taste some venison and be invigorated, that my nakedness may be clad in some wild, furry warmth?

The color of spring hitherto, — I should say that in dry weather it was fawn-colored, in wet more yellowish or tawny. When wet, the green of the fawn is supplied by the lichens and the mosses.

March 26. P. M. — To Conantum *via* Cardinal Shore and boat.

The river has gone down considerably, but the rain of yesterday and to-day has checked its fall somewhat.

Much earth has been washed away from the roots of grasses and weeds along the banks of the river, and many of those pretty little bodkin bulbs are exposed and so transported to new localities. This seems to be the way in which they are spread.

I see many smallish ants on the red carcass of a musquash just skinned and lying on the bank, cold and wet as the weather is. They love this animal food. On the top of the hill at Lee's Cliff much wintergreen has been eaten; at least a great many leaves are lying loose, strewn about.

I find washed up on the (Cardinal) shore a little bream about an inch and an eighth long, very much like those found at Walden last fall. It has about seven transverse bars, a similar dorsal fin, a reddish-copper iris, with the black vertical dash through the eye. I think it must be one of the common breams of the river, — though I see only the black spot on the operculum and not any red one, — and apparently all the young are thus striped (?).

What was that large rather grayish duck on Fair Haven Pond this afternoon? It was far off. Was it a last year's male sheldrake, or a female, or another?

March 27. 7 A. M. — Was that the *Alauda*, shore lark (?), which flew up from the corn-field beyond Texas house, and dashed off so swiftly with a peculiar note, — a small flock of them?

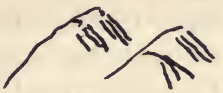
P. M. — Sail from Cardinal Shore up Otter Bay, close to Deacon Farrar's.

I see a gull flying over Fair Haven Pond which appears to have a much duskier body beneath than the common near by, though about the same size. Can it be another species?

The wind is so nearly west to-day that we sail up from Cardinal Shore to the pond, and from the road up what I will call Otter Bay, behind Farrar's, and, returning, sail from the road at Creel (or Pole) Brook to Pond Island and from Hallowell willows to railroad. The water is quite high still, and we sail up Otter Bay, I think, more than half a mile, to within a very short distance of Farrar's. This is an interesting and wild place.

There is an abundance of low willows whose catkins are now conspicuous, rising four to six or seven feet above the water, thickly placed on long wand-like osiers. They look, when you look from the sun, like dead gray twigs or branches (whose wood is exposed) of bushes in the light, but, nearer, are recognized for the pretty bright buttons of the willow. We sail by masses of these silvery buttons two or three rods long,

rising above the water. By their color they have relation to the white clouds and the sky and to the snow and ice still lingering in a few localities. In order to see these silvery buttons in the greatest profusion, you must sail amid them on some flooded meadow or swamp like this. Our whole course, as we wind about in this bay, is lined also with the alder, whose pretty tassels, now many of them in full bloom, are hanging straight down, suggesting in a peculiar manner the influence of gravity, or are regularly blown one side.



It is remarkable how modest and unobtrusive these early flowers are. The musquash and duck hunter or the farmer might and do commonly pass by them with[out] perceiving them. They steal into the air and light of spring without being noticed for the most part. The sportsman seems to see a mass of weather-stained dead twigs showing their wood and partly covered with gray lichens and moss, and the flowers of the alder, now partly in bloom, maybe half, make the impression at a little distance of a collection of the brown twigs of winter — also are of the same color with many withered leaves.

Twenty rods off, masses of alder in bloom look like masses of bare brown twigs, last year's twigs, and would be taken for such.

Of our seven indigenous flowers which begin to bloom in March, four, *i. e.* the two alders, the aspen, and the hazel, are not generally noticed so early, if at all, and most do not observe the flower of a fifth, the

white maple. The first four are yellowish or reddish brown at a little distance, like the banks and sward moistened by the spring rain. The browns are the prevailing shades as yet, as in the withered grass and sedge and the surface of the earth, the withered leaves, and these brown flowers.

I see from a hilltop a few very bright green spots a rod in diameter in the upper part of Farrar's meadow, which the water has left within a day or two. Going there, I find that a very powerful spring is welling up there, which, with water warm from the bowels of the earth, has caused the grass and several weeds, as *Cardamine rhomboidea*, etc., to grow thus early and luxuriantly, and perhaps it has been helped by the flood standing over it for some days. These are bright liquid green in the midst of brown and withered grass and leaves. Such are the spots where the grass is greenest now.

C. says that he saw a turtle dove on the 25th.

It is remarkable how long many things may be preserved by excluding the air and light and dust, moisture, etc. Those chalk-marks on the chamber-floor joists and timbers of the Hunt house, one of which was read by many "Feb. 1666," and all of which were in an ancient style of writing and expression,—"ye" for "the," etc., "enfine Brown,"—were as fresh when exposed (having been plastered and cased over) as if made the day before. Yet a single day's rain completely obliterated some of them. Cousin Charles says that, on the timbers of a very old house recently taken down in Haverhill, the chalk-marks made by

the framers, numbering the sticks, [were] as fresh as if just made.

I saw a large timber over the middle of the best room of the Hunt house which had been cased, according to all accounts, at least a hundred years ago, the casing having just been taken off. I saw that the timber appeared to have been freshly hewn on the under side, and I asked the carpenter who was taking down the house what he had been hewing that timber for, — for it had evidently been done since it was put up and in a very inconvenient position, and I had no doubt that he had just done it, for the surface was as fresh and distinct from the other parts as a fresh whittling, — but he answered to my surprise that he had not touched it, it was so when he took the casing off. When the casing was put on, it had been roughly hewn by one standing beneath it, in order to reduce its thickness or perhaps to make it more level than it was. So distinct and peculiar is the weather-stain, and so indefinitely it may be kept off if you do not allow this painter to come [?] to your wood.

Cousin Charles says that he took out of the old Haverhill house a very broad panel from over the fireplace, which had a picture of Haverhill at some old period on it. The panel had been there perfectly sheltered in an inhabited house for more than a hundred years. It was placed in his shop and no moisture allowed to come near it, and yet it shrunk a quarter of an inch in width when the air came to both sides of it.

He says that his men, who were digging a cellar last week on a southwest slope, found fifty-one snakes

of various kinds and sizes — green, black, brown, etc. — about a foot underground, within two feet square (or cube?). The frost was out just there, but not in many parts of the cellar. They could not run, they were so stiff, but they ran their tongues out. They did [not] take notice of any hole or cavity.

March 28. P. M. — Paddle to the Bedford line.

It is now high time to look for arrowheads, etc. I spend many hours every spring gathering the crop which the melting snow and rain have washed bare. When, at length, some island in the meadow or some sandy field elsewhere has been plowed, perhaps for rye, in the fall, I take note of it, and do not fail to repair thither as soon as the earth begins to be dry in the spring. If the spot chances never to have been cultivated before, I am the first to gather a crop from it. The farmer little thinks that another reaps a harvest which is the fruit of his toil. As much ground is turned up in a day by the plow as Indian implements could not have turned over in a month, and my eyes rest on the evidences of an aboriginal life which passed here a thousand years ago perchance. Especially if the knolls in the meadows are washed by a freshet where they have been plowed the previous fall, the soil will be taken away lower down and the stones left, — the arrowheads, etc., and soapstone pottery amid them, — somewhat as gold is washed in a dish or tom. I landed on two spots this afternoon and picked up a dozen arrowheads. It is one of the regular pursuits of the spring. As much as sportsmen go in pursuit of ducks, and

gunners of musquash, and scholars of rare books, and travellers of adventures, and poets of ideas, and all men of money, I go in search of arrowheads when the proper season comes round again. So I help myself to live worthily, and loving my life as I should. It is a good collyrium to look on the bare earth, — to pore over it so much, getting strength to all your senses, like Antæus. If I did not find arrowheads, I might, perchance, begin to pick up crockery and fragments of pipes, — the relics of a more recent man. Indeed, you can hardly name a more innocent or wholesome entertainment. As I am thus engaged, I hear the rumble of the bowling-alley's thunder, which has begun again in the village. It comes before the earliest natural thunder. But what its lightning is, and what atmospheres it purifies, I do not know. Or I might collect the various bones which I come across. They would make a museum that would delight some Owen at last, and what a text they might furnish me for a course of lectures on human life or the like! I might spend my days collecting the fragments of pipes until I found enough, after all my search, to compose one perfect pipe when laid together.

I have not decided whether I had better publish my experience in searching for arrowheads in three volumes, with plates and an index, or try to compress it into one. These durable implements seem to have been suggested to the Indian mechanic with a view to my entertainment in a succeeding period. After all the labor expended on it, the bolt may have been shot but once perchance, and the shaft which was devoted to

it decayed, and there lay the arrowhead, sinking into the ground, awaiting me. They lie all over the hills with like expectation, and in due time the husbandman is sent, and, tempted by the promise of corn or rye, he plows the land and turns them up to my view. Many as I have found, methinks the last one gives me about the same delight that the first did. Some time or other, you would say, it had rained arrowheads, for they lie all over the surface of America. You may have your peculiar tastes. Certain localities in your town may seem from association unattractive and uninhabitable to you. You may wonder that the land bears any money value there, and pity some poor fellow who is said to survive in that neighborhood. But plow up a new field there, and you will find the omnipresent arrow-points strewn over it, and it will appear that the red man, with other tastes and associations, lived there too. No matter how far from the modern road or meeting-house, no matter how near. They lie in the meeting-house cellar, and they lie in the distant cow-pasture. And some collections which were made a century ago by the curious like myself have been dispersed again, and they are still as good as new. You cannot tell the third-hand ones (for they are all second-hand) from the others, such is their persistent out-of-door durability; for they were chiefly made to be lost. They are sown, like a grain that is slow to germinate, broadcast over the earth. Like the dragon's teeth which bore a crop of soldiers, these bear crops of philosophers and poets, and the same seed is just as good to plant again. It is a stone fruit. Each one yields me a thought. I come nearer to the maker

of it than if I found his bones. His bones would not prove any wit that wielded them, such as this work of his bones does. It is humanity inscribed on the face of the earth, patent to my eyes as soon as the snow goes off, not hidden away in some crypt or grave or under a pyramid. No disgusting mummy, but a clean stone, the best symbol or letter that could have been transmitted to me.

The Red Man, his mark

At every step I see it, and I can easily supply the "Tahatawan" or "Mantatuket" that might have been written if he had had a clerk. It is no single inscription on a particular rock, but a footprint — rather a mind-print — left everywhere, and altogether illegible. No vandals, however vandalic in their disposition, can be so industrious as to destroy them.

Time will soon destroy the works of famous painters and sculptors, but the Indian arrowhead will balk his efforts and Eternity will have to come to his aid. They are not fossil bones, but, as it were, fossil thoughts, forever reminding me of the mind that shaped them. I would fain know that I am treading in the tracks of human game, — that I am on the trail of mind, — and these little reminders never fail to set me right. When I see these signs I know that the subtle spirits that made them are not far off, into whatever form transmuted. What if you do plow and hoe amid them, and swear that not one stone shall be left upon another? They are only the less like to break in that case. When

you turn up one layer you bury another so much the more securely. They are at peace with rust. This arrow-headed character promises to outlast all others. The larger pestles and axes may, perchance, grow scarce and be broken, but the arrowhead shall, perhaps, never cease to wing its way through the ages to eternity. It was originally winged for but a short flight, but it still, to my mind's eye, wings its way through the ages, bearing a message from the hand that shot it. Myriads of arrow-points lie sleeping in the skin of the revolving earth, while meteors revolve in space. The footprint, the mind-print of the oldest men. When some Vandal chieftain has razed to the earth the British Museum, and, perchance, the winged bulls from Nineveh shall have lost most if not all of their features, the arrowheads which the museum contains will, perhaps, find themselves at home again in familiar dust, and resume their shining in new springs upon the bared surface of the earth then, to be picked up for the thousandth time by the shepherd or savage that may be wandering there, and once more suggest their story to him. Indifferent they to British Museums, and, no doubt, Nineveh bulls are old acquaintances of theirs, for they have camped on the plains of Mesopotamia, too,[1] and were buried *with* the winged bulls.

They cannot be said to be lost nor found. Surely their use was not so much to bear its fate to some bird or quadruped, or man, as it was to lie here near the surface of the earth for a perpetual reminder to the generations that come after. As for museums, I think

[1] [Channing, p. 295.]

it is better to let Nature take care of our antiquities. These are our antiquities, and they are cleaner to think of than the rubbish of the Tower of London, and they are a more ancient armor than is there. It is a recommendation that they are so inobvious, — that they occur only to the eye and thought that chances to be directed toward them. When you pick up an arrowhead and put it in your pocket, it may say: "Eh, you think you have got me, do you? But I shall wear a hole in your pocket at last, or if you put me in your cabinet, your heir or great-grandson will forget me or throw me out the window directly, or when the house falls I shall drop into the cellar, and there I shall lie quite at home again. Ready to be *found* again, eh? Perhaps some new red man that is to come will fit me to a shaft and make me do his bidding for a bow-shot. What reck I?"

As we were paddling over the Great Meadows, I saw at a distance, high in the air above the middle of the meadow, a very compact flock of blackbirds advancing against the sun. Though there were more than a hundred, they did not appear to occupy more than six feet in breadth, but the whole flock was dashing first to the right and then to the left. When advancing straight toward me and the sun, they made but little impression on the eye, — so many fine dark points merely, seen against the sky, — but as often as they wheeled to the right or left, displaying their wings flatwise and the whole length of their bodies, they were a very conspicuous black mass. This fluctuation in the amount of dark surface was a very pleasing phenomenon. It reminded me [of] those blinds whose sashes [*sic*]

are made to move all together by a stick, now admitting nearly all the light and now entirely excluding it; so the flock of blackbirds opened and shut. But at length they suddenly spread out and dispersed, some flying off this way, and others that, as, when a wave strikes against a cliff, it is dashed upward and lost in fine spray. So they lost their compactness and impetus and broke up suddenly in mid-air.

We see eight geese floating afar in the middle of the meadow, at least half a mile off, plainly (with glass) much larger than the ducks in their neighborhood and the white on their heads very distinct. When at length they arise and fly off northward, their peculiar *heavy* undulating wings, blue-heron-like and unlike any duck, are very noticeable. The black, sheldrake, etc., move their wings rapidly, and remind you of paddle-wheel steamers. Methinks the wings of the black duck appear to be set very far back when it is flying. The meadows, which are still covered far and wide, are quite alive with black ducks.

When walking about on the low east shore at the Bedford bound, I heard a faint honk, and looked around over the water with my glass, thinking it came from that side or perhaps from a farmyard in that direction. I soon heard it again, and at last we detected a great flock passing over, quite on the other side of us and pretty high up. From time to time one of the company uttered a short note, that peculiarly metallic, clangorous sound. These were in a single undulating line, and, as usual, one or two were from time to time crowded out of the line, apparently by the

crowding of those in the rear, and were flying on one side and trying to recover their places, but at last a second short line was formed, meeting the long one at the usual angle and making a figure somewhat like a hay-hook. I suspect it will be found that there is really some advantage in large birds of passage flying in the wedge form and cleaving their way through the air, — that they really do overcome its resistance best in this way, — and perchance the direction and strength of the wind determine the comparative length of the two sides.

The great gulls fly generally up or down the river valley, cutting off the bends of the river, and so do these geese. These fly sympathizing with the river, — a stream in the air, soon lost in the distant sky.

We see these geese swimming and flying at midday and when it is perfectly fair.

If you scan the horizon at this season of the year you are very likely to detect a small flock of dark ducks moving with rapid wing athwart the sky, or see the undulating line of migrating geese against the sky.

Perhaps it is this easterly wind which brings geese, as it did on the 24th.

Ball's Hill, with its withered oak leaves and its pines, looks very fair to-day, a mile and a half off across the water, through a very thin varnish or haze. It reminds me of the isle which was called up from the bottom of the sea, which was given to Apollo.

How charming the contrast of land and water, espe-

cially a temporary island in the flood, with its new and tender shores of waving outline, so withdrawn yet habitable, above all if it rises into a hill high above the water and contrasting with it the more, and if that hill is wooded, suggesting wildness! Our vernal lakes have a beauty to my mind which they would not possess if they were more permanent. Everything is in rapid flux here, suggesting that Nature is alive to her extremities and superficies. To-day we sail swiftly on dark rolling waves or paddle over a sea as smooth as a mirror, unable to touch the bottom, where mowers work and hide their jugs in August; coasting the edge of maple swamps, where alder tassels and white maple flowers are kissing the tide that has risen to meet them. But this particular phase of beauty is fleeting. Nature has so many shows for us she cannot afford to give much time to this. In a few days, perchance, these lakes will have all run away to the sea. Such are the pictures which she paints. When we look at our masterpieces we see only dead paint and its vehicle, which suggests no liquid life rapidly flowing off from beneath. In the former case — in Nature — it is constant surprise and novelty. In many arrangements there is a wearisome monotony. We know too well what [we] shall have for our Saturday's dinner, but each day's feast in Nature's year is a surprise to us and adapted to our appetite and spirits. She has arranged such an order of feasts as never tires. Her motive is not economy but satisfaction.

As we sweep past the north end of Poplar Hill, with a sand-hole in it, its now dryish, pale-brown mottled

sward clothing its rounded slope, which was lately saturated with moisture, presents very agreeable hues. In this light, in fair weather, the patches of now dull-greenish mosses contrast just regularly enough with the pale-brown grass. It is like some rich but modest-colored Kidderminster carpet, or rather the skin of a monster python tacked to the hillside and stuffed with earth. These earth colors, methinks, are never so fair as in the spring. Now the green mosses and lichens contrast with the brown grass, but ere long the surface will be uniformly green. I suspect that we are more amused by the effects of color in the skin of the earth now than in summer. Like the skin of a python, greenish and brown, a fit coat for it to creep over the earth and be concealed in. Or like the skin of a pard, the great leopard mother that Nature is, where she lies at length, exposing her flanks to the sun. I feel as if I could land to stroke and kiss the very sward, it is so fair. It is homely and domestic to my eyes like the rug that lies before my hearth-side.[1] Such ottomans and divans are spread for us to recline on. Nor are these colors mere thin superficial figures, vehicles for paint, but wonderful living growths, — these lichens, to the study of which learned men have devoted their lives, — and libraries have been written about them. The earth lies out now like a leopard, drying her lichen and moss spotted skin in the sun, her sleek and variegated hide. I know that the few raw spots will heal over. Brown is the color for me, the color of our coats and our daily lives, the color of the poor man's loaf.

[1] [Channing, p. 95.]

The bright tints are pies and cakes, good only for October feasts, which would make us sick if eaten every day.

One side of each wave and ripple is dark and the other light blue, reflecting the sky, — as I look down on them from my boat, — and these colors (?) combined produce a *dark* blue at a distance. These blue spaces ever remind me of the blue in the iridescence produced by oily matter on the surface, for you are slow to regard it as a reflection of the sky. The rippling undulating surface over which you glide is like a changeable blue silk garment.

Here, where in August the bittern booms in the grass, and mowers march *en échelon* and whet their scythes and crunch the ripe wool-grass, raised now a few feet, you scud before the wind in your tight bark and listen to the surge (or sough?) of the great waves sporting around you, while you hold the steering-oar and your mast bends to the gale and you stow all your ballast to windward. The crisped sound of surging waves that rock you, that ceaseless roll and gambol, and ever and anon break into your boat.

Deep lie the seeds of the rhexia now, absorbing wet from the flood, but in a few months this mile-wide lake will have gone to the other side of the globe; and the tender rhexia will lift its head on the drifted hummocks in dense patches, bright and scarlet as a flame, — such succession have we here, — where the wild goose and countless wild ducks have floated and dived above them. So Nature condenses her matter. She

is a thousand thick. So many crops the same surface bears.

Undoubtedly the geese fly more numerously over rivers which, like ours, flow northeasterly, — are more at home with the water under them. Each flock runs the gantlet of a thousand gunners, and when you see them steer off from you and your boat you may remember how great their experience in such matters may be, how many such boats and gunners they have seen and avoided between here and Mexico, and even now, perchance (though you, low plodding, little dream it), they see one or two more lying in wait ahead. They have an experienced ranger of the air for their guide. The echo of one gun hardly dies away before they see another pointed at them. How many bullets or smaller shot have sped in vain toward their ranks! Ducks fly more irregularly and shorter distances at a time. The geese rest in fair weather by day only in the midst of our broadest meadow or pond. So they go, anxious and earnest to hide their nests under the pole.

The gulls seem used to boats and sails and will often fly quite near without manifesting alarm.

March 29. Driving rain and southeast wind, etc.

Walden is first clear after to-day.

Garfield says he saw a woodcock about a fortnight ago. Minott thinks the middle of March is as early as they come and that they do not then begin to lay.

March 30. 6 A. M. — To Hill (across water).

Hear a red squirrel chirrup at me by the hemlocks

(running up a hemlock), all for my benefit; not that he is excited by fear, I think, but so full is he of animal spirits that he makes a great ado about the least event. At first he scratches on the bark very rapidly with his hind feet without moving the fore feet. He makes so many queer sounds, and so different from one another, that you would think they came from half a dozen creatures. I hear now two sounds from him of a very distinct character, — a low or base inward, worming, screwing, or brewing, kind of sound (very like that, by the way, which an anxious partridge mother makes) and at the same time a very sharp and shrill bark, and clear, on a very high key, totally distinct from the last, — while his tail is flashing incessantly. You might say that he successfully accomplished the difficult feat of singing and whistling at the same time.

P. M. — To Walden *via* Hubbard's Close.

The green-bodied flies out on sheds, and probably nearly as long as the other; the same size as the house-fly.

I see numerous large skaters on a ditch. This may be the *Gerris lacustris*, but its belly is not white, only whitish in certain lights. It has six legs, two feelers (the two foremost legs being directed forward), a stoutish body, and brown above. The belly looks whitish when you look at it edgewise, but turned quite over (on its back), it is brown.

A very small brown grasshopper hops into the water.

I notice again (in the spring-holes in Hubbard's Close) that water purslane, being covered with water, is an evergreen, — though it is reddish.

Little pollywogs two inches long are lively there.

See on Walden two sheldrakes, male and female, as is common. So they have for some time paired. They are a hundred rods off. The male the larger, with his black head and white breast, the female with a red head. With my glass I see the long red bills of both. They swim at first one way near together, then tack and swim the other, looking around incessantly, never quite at their ease, wary and watchful for foes. A man cannot walk down to the shore or stand out on a hill overlooking the pond without disturbing them. They will have an eye upon him. The locomotive-whistle makes every wild duck start that is floating within the limits of the town. I see that these ducks are not here for protection alone, for at last they both dive, and remain beneath about forty pulse-beats, — and again, and again. I think they are looking for fishes. Perhaps, therefore, these divers are more likely to alight in Walden than the black ducks are.

Hear the hovering note of a snipe.

March 31. The frost is out of our garden, and I see one or two plowing early land. You walk dry now over this sandy land where the frost is melted, even after heavy rain, and there is no slumping in it, for there is no hard-pan and ice to hold the water and make a batter of the surface soil. This is a new condition of things when the surface of the earth generally begins to be dry. But there is still much frost in cold ground, and I often feel the crust which was heaved by it sink under me, and for some time have noticed the chinks

where the frozen ground has gaped and erected itself from and over stones and sleepers.

P. M. — To Holbrook's improvements.

Many painted turtles out along a ditch in Moore's Swamp. These the first I have seen, the water is so high in the meadows. One drops into the water from some dead brush which lies in it, and leaves on the brush two of its scales. Perhaps the sun causes the loosened scales to curl up, and so helps the turtle to get rid of them.

Humphrey Buttrick says that he has shot two kinds of little dippers, — the one black, the other with some white.

I see, on a large ant-hill, largish ants at work, front half reddish, back half black, but on another, very large ant-hill near by (a rod to left of Holbrook's road, perhaps fifty rods this side of his clearing on the north side), five feet through, there [are] none out.

It will show how our prejudices interfere with our perception of color, to state that yesterday morning, after making a fire in the kitchen cooking-stove, as I sat over it I thought I saw a little bit of red or scarlet flannel on a chink near a bolt-head on the stove, and I tried to pick it out, — while I was a little surprised that I did not smell it burning. It was merely the reflection of the flame of the fire through a chink, on the dark stove. This showed me what the true color of the flame was, but when I knew what this was, it was not very easy to perceive it again. It appeared now more yellowish. I think that my senses made the truest report the first time.

The wood frogs lie spread out on the surface of the sheltered pools in the woods, cool and windy as it is, dimpling the water by their motions, and as you approach you hear their lively *wurk wurrk wur-r-k*, but, seeing you, they suddenly hist and perhaps dive to the bottom.

It is a very windy afternoon, wind northwest, and at length a dark cloud rises on that side, evidently of a windy structure, a dusky mass with lighter intervals, like a parcel of brushes lying side by side, — a parcel of "mare's-tails" perhaps. It winds up with a flurry of rain.

II

APRIL, 1859

(ÆT. 41)

April 1. Some have planted peas and lettuce.

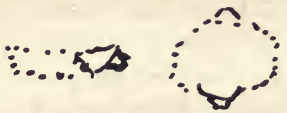
Melvin, the sexton, says that when Loring's Pond was drained once — perhaps the dam broke — he saw there about all the birds he has seen on a salt marsh. Also that he once shot a mackerel gull in Concord, — I think he said it was in May; that he sees the two kinds of yellow-legs here; that he has shot at least two kinds of large gray ducks, as big (one, at least) as black ducks.

He says that one winter (it may have been the last) there were caught by him and others at one place in the river below Ball's Hill, in sight of Carlisle Bridge, about two hundred pounds of pickerel within a week, — something quite unprecedented, at least of late years. This was about the last of February or first of March. No males were caught! and he thinks that they had collected there in order to spawn. Perhaps perch and pickerel collect in large numbers for this purpose.

P. M. — To Assabet over meadows in boat; a very strong and a cold northwest wind.

I land again at the (now island) rock, on Simon Brown's land, and look for arrowheads, and picked [*sic*] up two pieces of soapstone pottery. One was probably part of the same which C. found with me there

the other day. C.'s piece was one side of a shallow dish, say an inch and a half deep, four eighths to six eighths of an inch thick, with a sort of ear for handle on one side, — almost a leg.



His piece, like mine, looks as if it had been scratched all over on the outside by a nail, and it is evident that this is the way it was fashioned. It was scratched with some hard, sharp-pointed stone and so crumbled and worn away.

This little knoll was half plowed (through its summit) last fall in order to be cultivated this spring, and the high water standing over all but the apex has for a fortnight been faithfully washing away the soil and leaving the stones — Indian relics and others — exposed. The very roots of the grass, yellowish-brown fibres, are thus washed clean and exposed in considerable quantity there. You could hardly have contrived a better way to separate the arrowheads that lay buried in that sod between the rocks from the sod and soil.

At the Pokelogan up the Assabet, I see my first phœbe, the mild bird. It flirts its tail and sings *pre vit, pre vit, pre vit, pre vit* incessantly, as it sits over the water, and then at last, rising on the last syllable, says *pre*-VEE, as if insisting on that with peculiar emphasis.

The villagers remark how dark and angry the water looks to-day. I think it is because it is a clear and very windy day and the high waves cast much shadow.

Crow blackbirds common.

April 2. P. M. — To Lee's Cliff (walking).

Alders generally appear to be past prime.[1] I see a little snow ice in one place to-day. It is still windy and cool, but not so much so as yesterday. I can always sail either up or down the river with the rudest craft, for the wind always blows more or less with the river valley. But where a blunt wooded cape or hill projects nearly in the direction to which the wind is blowing, I find that it blows in opposite directions off that shore, while there may be quite a lull off the centre. This makes a baffling reach. Generally a high wood close upon the west side of our river, the prevailing winds being northwest, makes such a reach.

There are many fuzzy gnats now in the air, windy as it is. Especially I see them under the lee of the middle Conantum cliff, in dense swarms, all headed one way, but rising and falling suddenly all together as if tossed by the wind. They appear to love best a position just below the edge of the cliff, and to rise constantly high enough to feel the wind from over the edge, and then sink suddenly down again. They are not, perhaps, so thick as they will be, but they are suddenly much thicker than they were, and perhaps their presence affects the arrival of the phœbe, which, I suspect, feeds on them.

From near this cliff, I watch a male sheldrake in the river with my glass. It is very busily pluming itself while it sails about, and from time to time it raises itself upright almost entirely out of water, showing

[1] *Incana* on causeways, *i. e.* the earliest ones. See some same [?] species not open, the 10th.

its rosaceous breast. It is some sixty rods off, yet I can see the red bill distinctly when it is turned against its white body. Soon after I see two more, and one, which I think is not a female, is more gray and far less distinctly black and white than the other. I think it is a young male and that it might be called by some a gray duck. However, if you show yourself within sixty rods, they will fly or swim off, so shy are they. Yet in the fall I sometimes get close upon a young bird, which dashes swiftly across or along the river and dives.

In the wood on top of Lee's Cliff, where the other day I noticed that the chimaphila leaves had been extensively eaten and nibbled off and left on the ground, I find under one small pitch pine tree a heap of the cones which have been stripped of their scales, evidently by the red squirrels, the last winter and fall, they having sat upon some dead limbs above. They were all stripped regularly from the base upward, excepting the five to seven uppermost and barren scales, making a pretty figure like this:—

I counted two hundred and thirty-nine cones under this tree alone, and most of them lay within two feet square upon a mass of the scales one to two inches deep and three or four feet in diameter. There were also many cones under the surrounding pines. Those I counted

would have made some three quarts or more. These had all been cut off by the squirrels and conveyed to this tree and there stripped and eaten. They appeared to have devoured all the fruit of that pitch pine grove, and probably it was they that nibbled the wintergreen. No fruit grows in vain. The red squirrel harvests the fruit of the pitch pine. His body is about the color of the cone. I should like to get his recipe for taking out pitch, for he must often get his chaps defiled, methinks. These were all fresh cones, the fruit of last year, perhaps. There was a hole in the ground where they lodged by that tree.

I see fly across the pond a rather large hawk, and when at length it turns up am surprised to see a large blackish spot on the under side of each wing, reminding me of the nighthawk. Its wings appeared long and narrow, but it did not show the upper or under side till far off, — sailing [?] so level. What was it?

The bass recently cut down at Miles Swamp, which averages nearly two and a half feet in diameter at the ground, has forty-seven rings, and has therefore grown fast. The black ash is about eighteen inches in diameter and has forty-eight rings. The white ash is about fifteen inches in diameter and has seventy-eight rings.

I see the small botrychium still quite fresh in the open pasture, only a reddish or leathery brown, — some, too, yellow. It is therefore quite evergreen and more than the spleenworts.

As I go down the street just after sunset, I hear many snipe to-night. This sound is annually heard by the

villagers, but always at this hour, *i. e.* in the twilight, — a hovering sound high in the air, — and they do not know what to refer it to. It is very easily imitated by the breath. A sort of shuddering with the breath. It reminds me of calmer nights. Hardly one in a hundred hears it, and perhaps not nearly so many know what creature makes it. Perhaps no one dreamed of snipe an hour ago, but the air seemed empty of such as they; but as soon as the dusk begins, so that a bird's flight is concealed, you hear this peculiar spirit-suggesting sound, now far, now near, heard through and above the evening din of the village. I did not hear one when I returned up the street half an hour later.

April 3. An easterly wind and rain.

P. M. — To White Pond.

C. says he saw a striped snake on the 30th. We go by Clamshell. The water on the meadows is now visibly lowered considerably, and the tops of bushes begin to appear. The high water has stood over and washed down the base of that avalanche of sand from my new ravine, leaving an upright edge a foot high, and as it subsided gradually, it has left various parallel shore-lines, with stones arranged more or less in rows along them, thus forming a regular beach of four or five rods' length.

The bæomyces is in its perfection this rainy day. I have for some weeks been insisting on the beauty and richness of the moist and saturated crust of the earth. It has seemed to me more attractive and living than ever, — a very sensitive cuticle, teeming with life, espe-

cially in the rainy days. I have looked on it as the skin of a pard. And on a more close examination I am borne out by discovering, in this now so bright bæomyces and in other earthy lichens and in cladonias, and also in the very interesting and pretty red and yellow stemmed mosses, a manifest sympathy with, and an expression of, the general life of the crust. This early and hardy cryptogamous vegetation is, as it were, a flowering of the crust of the earth. Lichens and these mosses, which depend on moisture, are now most rampant. If you examine it, this brown earth-crust is not dead. We need a popular name for the bæomyces. C. suggests "pink mould." Perhaps "pink shot" or "eggs" would do.

A great many oak leaves have been blown off in the late windy weather. When I disturb a leaf in the woods I find it quite dry within this rainy day. I saw the other day a long winrow of oak leaves, a foot high, washed up on the meadow-edge a quarter of a mile off, opposite Ball's Hill, whence they partly came.

It does not rain hard to-day, but mizzles, with considerable wind, and your clothes are finely bedewed with it even under an umbrella. The rain-drops hanging regularly under each twig of the birches, so full of light, are a very pretty sight as you look forth through the mizzle from under your umbrella. In a hard rain they do not lodge and collect thus.

I hear that Peter Hutchinson hooked a monstrous pickerel at the Holt last winter. It was so large that he could not get his head through the hole, and so they cut another hole close by, and then a narrow channel

from that to the first to pass the line through, but then, when they came to pull on the line, the pickerel gave a violent jerk and escaped. Peter thinks that he must have weighed ten pounds.

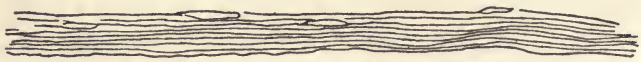
Men's minds run so much on work and money that the mass instantly associate all literary labor with a pecuniary reward. They are mainly curious to know how much money the lecturer or author gets for his work. They think that the naturalist takes so much pains to collect plants or animals because he is paid for it. An Irishman who saw me in the fields making a minute in my note-book took it for granted that I was casting up my wages and actually inquired what they came to, as if he had never dreamed of any other use for writing. I might have quoted to him that the wages of sin is death, as the most pertinent answer. "What do you get for lecturing now?" I am occasionally asked. It is the more amusing since I only lecture about once a year out of my native town, often not at all; so that I might as well, if my objects were merely pecuniary, give up the business. Once, when I was walking on Staten Island, looking about me as usual, a man who saw me would not believe me when I told him that I was indeed from New England but was not looking at that region with a pecuniary view, — a view to speculation; and he offered me a handsome bonus if I would sell his farm for him.

I see by the White Pond path many fox-colored sparrows apparently lurking close under the lee side of a wall out of the way of the storm. Their tails near the base are the brightest things of that color — a rich

cinnamon-brown — that I know. Their note to-day is the *chip* much like a tree sparrow's. We get quite near them.

Near to the pond I see a small hawk, larger than a pigeon hawk, fly past, — a deep brown with a light spot on the side. I think it probable it was a sharp-shinned hawk.

The pond is quite high (like Walden, which, as I noticed the 30th *ult.*, had risen about two feet since January, and perhaps within a shorter period), and the white sand beach is covered. The water being quite shallow on it, it is very handsomely and freshly ripple-marked for a rod or more in width, the ripples only two or three inches apart and very regular and parallel, but occasionally there is a sort of cell a foot long (a split closed at each end) in one. In some parts, indeed, it reminded me of a cellular tissue, but the last foot next the shore had no ripple-marks; apparently they were constantly levelled there. These were most conspicuous where a dark sediment, the dead wood or crumbled leaves, perchance, from the forest, lay in the furrows and contrasted with the white sand. The



cells were much more numerous and smaller in proportion than I represent them.

I find in drawing these ripple-marks that I have drawn precisely such lines as are used to represent a shore on maps, and perchance the sight of these parallel ripple-marks may have suggested that method of drawing a shore-line. I do not believe it, but if we were

to draw such a lake-shore accurately it would be very similar.

April 4. Clear, cold, and very windy; wind northwest.

For a fortnight past, or since the frost began to come out, I have noticed the funnel-shaped holes of the skunk in a great many places and their little mincing tracks in the sand. Many a grub and beetle meets its fate in their stomachs.

Methinks the peculiar and interesting *Brown Season* of the spring lasts from the time the snow generally begins to go off — as this year the fore part of March — till the frost is generally (or entirely?) out. Perhaps it will be through the first week of April this year. Ordinary years it must be somewhat later. The surface of the earth is never so completely saturated with wet as during this period, for the frost a few inches beneath holds all the ice and snow that are melted and the rain, and an unusual amount of rain falls. All plants, therefore, that love moisture and coolness, like mosses and lichens, are in their glory, but also [?] I think that the very withered grass and weeds, being wet, are *blooming* at this season. The conspicuous reddish brown of the fallen brakes is very rich, contrasting with the paler brown of oak leaves.

Such an appetite have we for new life that we begin by nibbling the very crust of the earth. We betray our vegetable and animal nature and sympathies by our delight in water. We rejoice in the full rills, the melting snow, the copious spring rains and the freshets, as if

we were frozen earth to be thawed, or lichens and mosses, expanding and reviving under this influence.

The osier bark now, as usual, looks very yellow when wet, and the wild poplar very green.

P. M. — To Cliffs.

Those striped snakes of the 30th were found (several in all) on west side the railroad causeway, on the sand, which is very warm. It would seem, then, that they come out in such places soon after the frost is out. The railroad men who were cutting willows there to set on the sides of the Deep Cut, to prevent the gullying there, came across them.

The epigæa looks as if it would open in two or three days at least,[1] — showing much color and this form: The flower-buds are protected by the withered leaves, oak leaves, which partly cover them, so that you must look pretty sharp to detect the first flower. These plants blossom by main strength, as it were, or the virtue that is in them, — not growing by water, as most early flowers, — in dry copses.

I see several earthworms to-day under the shoe of the pump, on the platform. They may have come up through the cracks from the well where the warm air has kept them stirring.

On the barren railroad causeway, of pure sand, grow chiefly sallows, a few poplars, and sweet-fern and blackberry vines.

When I look with my glass, I see the cold and sheeny snow still glazing the mountains. This it is which makes

[1] *Vide* 12th.

the wind so piercing cold. There are dark and windy clouds on that side, of that peculiar brushy or wispy character — or rather like sheafs — which denotes wind. They only spit a little snow at last, thin and scarcely perceived, like falling gossamer.

April 5. In running a line through a wood-lot in the southwest part of Lincoln to-day, I started from an old pine stump, now mostly crumbled away, though a part of the wood was still hard above ground, which was described in his [*sic*] deed of 1813 (forty-six years ago) as a pine stump. It was on the side of a hill above Deacon Farrar's meadow.

As I stood on a hill just cut off, I saw, half a dozen rods below, the bright-yellow catkins of a tall willow just opened on the edge of the swamp, against the dark-brown twigs and the withered leaves. This early blossom looks bright and rare amid the withered leaves and the generally brown and dry surface, like the early butterflies. This is the most conspicuous of the March flowers (*i. e.* if it chances to be so early as March). It suggests unthought-of warmth and sunniness. It takes but little color and tender growth to make miles of dry brown woodland and swamp look habitable and home-like, as if a man could dwell there.

Mr. Haines, who travelled over the lots with us this very cold and blustering day, was over eighty.

"What raw, blustering weather!" said I to my employer to-day. "Yes," answered he. "Did you see those two sun-dogs on Saturday?" They are a pretty sure sign of cold and windy weather.

April 6. Another remarkably windy day; cold northwest wind and a little snow spitting from time to time, yet so little that even the traveller might not perceive it.

For nineteen days, from the 19th of March to the 6th of April, both inclusive, we have had remarkably windy weather. For ten days of the nineteen the wind has been remarkably strong and violent, so that each of those days the wind was the subject of general remark. The first one of these ten days was the warmest, the wind being southwest, but the others, especially of late, were very cold, the wind being northwest, and for the most part icy cold. There have also been five days that would be called windy and only four which were moderate. The last seven, including to-day, have all been windy, five of them remarkably so; wind from northwest.[1]

The sparrows love to flit along any thick hedge, like that of Mrs. Gourgas's. Tree sparrows, *F. hyemalis*, and fox-colored sparrows in company.

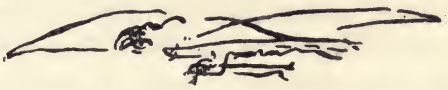
A fish hawk sails down the river, from time to time almost stationary one hundred feet above the water, notwithstanding the very strong wind.

I see where moles have rooted in a meadow and cast up those little piles of the black earth.

April 7. The Cheney elm looks as if it would shed pollen to-morrow,[2] and the *Salix purpurea* will perhaps within a week.[3]

P. M. — Up Assabet with Pratt.

[1] *Vide* 10th, forward. [2] No. [3] *Vide* 13th.

Standing under the north side of the hill, I hear the rather innocent *phe phe, phe phe, phe phe, phe'* of a fish hawk (for it is not a scream, but a rather soft and innocent note), and, looking up, see one come sailing from over the hill. The body looks quite short in proportion to the spread of the wings, which are quite dark or blackish above. He evidently has something in his talons. We soon after disturb him again, and, at length, after circling around over the hill and adjacent fields, he alights in plain sight on one of the half-dead white oaks on the top of the hill, where probably he sat before. As I look through my glass, he is perched on a large dead limb and is evidently standing on a fish (I had noticed something in his talons as he flew), for he stands high and uneasily, finding it hard to keep his balance in the wind. He is disturbed by our neighborhood and does not proceed at once to eat his meal. I see the tail of the fish hanging over the end of the limb. Now and then he pecks at it. I see the white on the crown of the hawk. It is a very large black bird as seen against the sky. Soon he sails away again, carrying his fish, as before, horizontally beneath his body,  and he circles about over the adjacent pasture like a hawk hunting, though he can only be looking for a suitable place to eat his fish or waiting for us to be gone.

Looking under the limb on which he was perched, we find a piece of the skin of a sucker (?) or some other scaly fish which a hawk had dropped there long since.

No doubt many a fish hawk has taken his meal on that sightly perch.

It seems, then, that the fish hawk which you see soaring and sailing so leisurely about over the land — for this one soared quite high into the sky at one time — may have a fish in his talons all the while and only be waiting till you are gone for an opportunity to eat it on his accustomed perch.

I told Pratt my theory of the formation of a swamp on a hillside, but he thought that the growth of the alders, etc., there would not make the ground any more moist there, but less so, and stated that the soil (as he had noticed) was drier under rank grass in a mowing-field than at the same depth under a surface of bare and hot sand, because the grass took up the moisture from the soil.

I saw a hole (probably of a woodchuck) partly dug on the east side of the hill, and three or four large stones lay on the fresh sand-heap thrown out, which the woodchuck had pushed up from below. One was about six inches long by four or more wide and might weigh four pounds, and, looking into the hole, whose bottom I could not see, I saw another nearly as large about three feet down, on its way up. I have seen their holes dug in much worse places than this. This hole sloped downward at a considerable angle, so that the stones had to be pushed up a steep slope.

A small hawk flies swiftly past on the side of the hill, swift and low, apparently the same as that of April 3d, a deep rusty brown.

The woodchuck probably digs in a stony place that he may be the more secure.

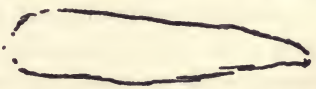
I hear there the hovering note of a snipe at 4.30 P. M., — unusually early in the day.[1]

Find a *Sternothærus odoratus* so far from water on Simon Brown's knoll, where water has not been since about March 20th, that I think he was then washed and left there and has since lain in the ground. There are two or three small leeches on him, which may have adhered to him all winter. The white man's relics in the fields are like the Indian's, — pipes, pottery, and (instead of arrowheads) bullets.

April 8. *Friday.* I believe that I rarely hear the nuthatch's note from the elms toward evening, for when I heard it yesterday evening I was surprised.

P. M. — To epigæa and Well Meadow.

I see on the west side of the railroad causeway a peculiar early willow, now just beginning to bloom with the common *Salix discolor* there, perhaps (as I remember) some thirty rods beyond the wall, against A. Wheeler's land. The catkins (sterile) are peculiarly long and tapering, and grayish or mouse-color, beginning to open low on one side, while the points have comparatively little down on them. I find no description of it. Perhaps rather more than one inch long. The most decidedly opening first on one side near the base of any. Call it the gray bodkin-pointed.



As I stood by the foot of a middling-sized white pine

[1] Also the next day at 9 A. M. as much as ever, through the wind!

the other day, on Fair Haven Hill, one of the very windy days, I felt the ground rise and fall under my feet, being lifted by the roots of the pine, which was waving in the wind; so loosely are they planted.

We have had two more windy days, this and yesterday, though less so than the previous ones. We have had, most of the time, during this windy weather for a month past, when the wind was northwest, those peculiar brushy clouds which look as if a little snow or rain was falling in the northwest, but they prove to be wind chiefly. It has not rained, I think, with the wind in that quarter.

These windy days the sparrows resort to the pines and peach trees on the east side of our house for shelter, and there they sing all together, — tree sparrows, fox-colored sparrows, and song sparrows. The *F. hyemalis* with them do not sing so much of late. The first two are most commonly heard together, the fine canary-like twitter of the tree sparrow appearing to ripen or swell from time to time into the clear, rich whistle of the fox-colored sparrow, so that most refer both notes to one bird.

What a pitiful business is the fur trade, which has been pursued now for so many ages, for so many years by famous companies which enjoy a profitable monopoly and control a large portion of the earth's surface, unweariedly pursuing and ferreting out small animals by the aid of all the loafing class tempted by rum and money, that you may rob some little fellow-creature of its coat to adorn or thicken your own, that you may get a fashionable covering in which to hide your head,

or a suitable robe in which to dispense justice to your fellow-men! Regarded from the philosopher's point of view, it is precisely on a level with rag and bone picking in the streets of the cities. The Indian led a more respectable life before he was tempted to debase himself so much by the white man. Think how many musquash and weasel skins the Hudson's Bay Company pile up annually in their warehouses, leaving the bare red carcasses on the banks of the streams throughout all British America, — and this it is, chiefly, which makes it *British* America. It is the place where Great Britain goes a-mousing. We have heard much of the wonderful intelligence of the beaver, but that regard for the beaver is all a pretense, and we would give more for a beaver hat than to preserve the intelligence of the whole race of beavers.

When we see men and boys spend their time shooting and trapping musquash and mink, we cannot but have a poorer opinion of them, unless we thought meanly of them before. Yet the world is imposed on by the fame of the Hudson's Bay and Northwest Fur Companies, who are only so many partners more or less in the same sort of business, with thousands of just such loafing men and boys in their service to abet them. On the one side is the Hudson's Bay Company, on the other the company of scavengers who clear the sewers of Paris of their vermin. There is a good excuse for smoking out or poisoning rats which infest the house, but when they are as far off as Hudson's Bay, I think that we had better let them alone. To such an extent do time and distance, and our imagina-

tions, consecrate at last not only the most ordinary, but even vilest pursuits. The efforts of legislation from time to time to stem the torrent are significant as showing that there is some sense and conscience left, but they are insignificant in their effects. We will fine Abner if he shoots a singing bird, but encourage the army of Abners that compose the Hudson's Bay Company.

One of the most remarkable sources of profit opened to the Yankee within a year is the traffic in skunk-skins. I learn from the newspapers — as from other sources (*vide* Journal of Commerce in *Tribune* for April 5, 1859) — that "the traffic in skunk-skins has suddenly become a most important branch of the fur trade, and the skins of an animal which three years ago were deemed of no value whatever, are now in the greatest demand." "The principal markets are Russia and Turkey, though some are sent to Germany, where they are sold at a large profit." Furs to Russia! "The black skins are valued the most, and during the past winter the market price has been as high as one dollar per skin, while mottled skins brought only seventy cents." "Upward of 50,000 of these skins have been shipped from this city [New York] alone within the past two months." Many of them "are designed for the Leipsic sales, Leipsic being next to Novgorod, in Russia, the most important fur *entrepôt* in Europe. The first intimation received in this market of the value of this new description of fur came from the Hudson's Bay Company, which, having shipped a few to London at a venture, found the returns so profitable that

they immediately prosecuted the business on an extensive scale." "The heaviest collections are made in the Middle and Eastern States, in some parts of which the mania for capturing these animals seems to have equalled the Western Pike's Peak gold excitement, men, women, and children turning out *en masse* for that purpose." And beside, "our fur dealers also receive a considerable sum for the *fat* of these animals!!"

Almost all smile, or otherwise express their contempt, when they hear of this or the rat-catching of Paris, but what is the difference between catching and skinning the skunk and the mink? It is only in the name. When you pass the palace of one of the managers of the Hudson's Bay Company, you are reminded that so much he got for his rat-skins. In such a snarl and contamination do we live that it is almost impossible to keep one's skirts clean. Our sugar and cotton are stolen from the slave, and if we jump out of the fire, it is wont to be into the frying-pan at least. It will not do to be thoughtless with regard to any of our valuables or property. When you get to Europe you will meet the most tender-hearted and delicately bred lady, perhaps the President of the Antislavery Society, or of that for the encouragement of humanity to animals, marching or presiding with the scales from a tortoise's back — obtained by laying live coals on it to make them curl up — stuck in her hair, rat-skin fitting as close to her fingers as erst to the rat, and, for her cloak, trimmings perchance adorned with the spoils of a hundred skunks, — rendered inodorous, we trust. Poor mis-

guided woman! Could she not wear other armor in the war of humanity?

When a new country like North America is discovered, a few feeble efforts are made to Christianize the natives before they are all exterminated, but they are not found to pay, in any sense. But the energetic traders of the discovering country organize themselves, or rather inevitably crystallize, into a vast rat-catching society, tempt the natives to become mere vermin-hunters and rum-drinkers, reserving half a continent for the field of their labors. Savage meets savage, and the white man's only distinction is that he is the chief.

She says to the turtle basking on the shore of a distant isle, "I want your scales to adorn my head" (though fire be used to raise them); she whispers to the rats in the wall, "I want your skins to cover my delicate fingers;" and, meeting an army of a hundred skunks in her morning walk, she says, "worthless vermin, strip off your cloaks this instant, and let me have them to adorn my robe with;" and she comes home with her hands muffled in the pelt of a gray wolf that ventured abroad to find food for its young that day.

When the question of the protection of birds comes up, the legislatures regard only a low use and never a high use; the best-disposed legislators employ one, perchance, only to examine their crops and see how many grubs or cherries they contain, and never to study their dispositions, or the beauty of their plumage, or listen and report on the sweetness of their song. The legislature will preserve a bird professedly not because it is a beautiful creature, but because it is a good sca-

venger or the like. This, at least, is the defense set up. It is as if the question were whether some celebrated singer of the human race — some Jenny Lind or another — did more harm or good, should be destroyed, or not, and therefore a committee should be appointed, not to listen to her singing at all, but to examine the contents of her stomach and see if she devoured anything which was injurious to the farmers and gardeners, or which they cannot spare.[1]

Cold as it is, and has been for several weeks, in all exposed places, I find it unexpectedly warm in perfectly sheltered places where the sun shines. And so it always is in April. The cold wind from the northwest seems distinct and separable from the air here warmed by the sun, and when I sit in some warm and sheltered hollow in the woods, I feel the cold currents drop into it from time to time, just as they are seen to ripple a small lake in such a situation from time to time.

The epigæa is not quite out. The earliest peculiarly woodland herbaceous flowers are epigæa, anemone, thalictrum, and — by the first of May — *Viola pedata*. These grow quite in the woods amid dry leaves, nor do they depend so much on water as the very earliest flowers. I am, perhaps, more surprised by the growth of the *Viola pedata* leaves, by the side of paths amid the shrub oaks and half covered with oak leaves, than by any other growth, the situation is so dry and the surrounding bushes so apparently lifeless.

I noticed the other day a leaf on a young oak very

[1] *Vide* April 21st.

rapidly revolving like a windmill, in the wind, not around its midrib for an axis, but about its broken stem, and I saw that this was the way those curiously broken and twisted and splintered petioles were made. It went round so fast as almost to appear like a circular figure.

I find that the cress (*Cardamine hirsuta*) which was so forward at Well Meadow a fortnight ago has been almost entirely browsed off by some creature, so that, if I had not detected it, I might have been surprised that it made no more show. The skunk-cabbage leaf-buds, which have just begun to unroll, also have been extensively eaten off as they were yet rolled up like cigars. These early greens of the swamp are thus kept down. Is it by the rabbit? I could see the tracks of some animal, apparently as large, very indistinct in the mud and water. Also an early kind of sedge there was cropped. The only animals at all likely to have done this are rabbits, musquash, woodchuck (though I doubt if the last has been about here long enough), and geese. Of these, I think it most likely to have been the first, and probably it was the same that gnawed the spathes and ate up the spadix of the cabbage some weeks ago. Woodchucks might nibble some plants now in warmer and drier places. These earliest greens must be very acceptable to these animals. Do partridges ever eat these things?

The *Alnus serrulata* is evidently in its prime considerably later than the *incana*, for those of the former which I notice to-day have scarcely begun, while the latter chance to be done. The fertile flowers are an interesting bright crimson in the sun.

C. says that he found a musquash's skull (which he showed me) at the fox-burrow in Laurel Glen, from which it would appear that they kill the musquash.

See the first bay-wing hopping and flitting along the railroad bank, but hear no note as yet.

I saw Heavy Haynes fishing for trout down the Mill Brook this morning, cold and blustering as it was. He caught two. He is splitting pine-knots at the almshouse door for spearing. Has already been spearing in Walden, and got some pickerel, all in the two little meadows there, and saw some pouts and perch. So the pickerel have come into those meadows, probably since January, for the bars were dry before. Perhaps they lie in shallow water, not for warmth, — for it is coldest there by night now, — but for food, the early insects and frogs which may soonest be found there!

April 9. P. M. — To Goose Pond.

The wind is as strong, and yet colder, being more from the north, than before. Through, I think, all this windy weather, or at least for about three weeks, the wind has regularly gone down with the sun, strong as it has been each day.

As we go up the hill in the woods east of Hubbard's Close, I hear a singular sound through the roaring of the wind amid the trees, which I think at first some creature forty rods off, but it proves to be the creaking of one bough on another. When I knew what it was I was surprised to find it so near, even within a rod. It was occasioned by two little dead limbs, an inch or less in diameter, on two different white pines

which stood four or five feet apart, — such limbs as are seen on every white pine below the living ones, some twelve feet from the ground. These with every motion of the trees in the wind were grating back and forth on each other, and had worn into one another, and this produced, not a mere coarse, grating sound, but a perfect viol sound, such as I never heard from trees before, — a jarring or vibratory creak, as if the bow leaped on the strings, for one limb was bow and the other string. It was on one key or note when the trees approached, and quite another and very fine and sharp when they receded. I raised one limb with a pole, and the music ceased. This was as musical as a viol, a forest viol, which might have suggested that instrument to some Orpheus wandering in the wood. He would only have to place a box of resonant wood beneath to complete a simple viol. We heard several others afterward which made a coarse, squeaking noise like a bird, but this would have suggested music to any one. It was mythologic, and an Indian might have referred it to a departed spirit. The fiddles made by the trees whose limbs cross one another, — played on by the wind! When we listened, in the wood, we heard all kinds of creaking and groaning sounds from the laboring trees.

We go seeking the south sides of hills and woods, or deep hollows, to walk in this cold and blustering day. We sit by the side of Little Goose Pond, which C. calls Ripple Lake or Pool, to watch the ripples on it. Now it is nearly smooth, and then there drops down on to it, deep as it lies amid the hills, a sharp and nar-

row blast of the icy north wind careering above, striking it, perhaps, by a point or an edge, and swiftly spreading along it, making a dark-blue ripple. Now four or five windy bolts, sharp or blunt, strike it at once and spread different ways. The boisterous but playful north wind evidently stoops from a considerable height to dally with this fair pool which it discerns beneath. You could sit there and watch these blue shadows playing over the surface like the light and shade on changeable silk, for hours. It reminds me, too, of the swift Camilla on a field [of] grain. The wind often touches the water only by the finest points or edges. It is thus when you look in some measure from the sun, but if you move round so as to come more opposite to him, then all these dark-blue ripples are all sparkles too bright to look at, for you now see the sides of the wavelets which reflect the sun to you.

A large fox-hole in Britton's hollow, lately dug; an ox-cartload of sand, or more, thrown up on the hillside.

Watching the ripples fall and dash across the surface of low-lying and small woodland lakes is one of the amusements of these windy March and April days. It is only on small lakes deep sunk in hollows in the woods that you can see or study them these days, for the winds sweep over the whole breadth of larger lakes incessantly, but they only touch these sheltered lakelets by fine points and edges from time to time.

And then there is such a fiddling in the woods, such a viol-creaking of bough on bough, that you would think music was being born again, as in the days of

Orpheus. Orpheus and Apollo are certainly there taking lessons; aye, and the jay and the blackbird, too, learn now where they stole their "thunder." They are perforce silent, meditating new strains.

When the playful breeze drops on the pool, it springs to right and left, quick as a kitten playing with dead leaves, clapping her paw on them. Sometimes it merely raises a single wave at one point, as if a fish darted near the surface. While to you looking down from a hillside partly from the sun, these points and dashes look thus dark-blue, almost black, they are seen by another, standing low and more opposite to the sun, as the most brilliant sheeny and sparkling surface, too bright to look at. Thus water agitated by the wind is both far brighter and far darker than smooth water, seen from this side or that, — that is, as you look at the inclined surface of the wave which reflects the sun, or at the shaded side. For three weeks past, when I have looked northward toward the flooded meadows they have looked dark-blue or blackish, in proportion as the day was clear and the wind high from the northwest, making high waves and much shadow.

We can sit in the deep hollows in the woods, like Frosty Hollow near Ripple Lake, for example, and find it quite still and warm in the sun, as if a different atmosphere lurked there; but from time to time a cold puff from the rude Boreas careering overhead drops on us, and reminds us of the general character of the day. While we lie at length on the dry sedge, nourishing spring thoughts, looking for insects, and counting the rings on old stumps.

These old gray or whitish stumps, with their porous structure where the ducts are seen, are very much like bones, — the bones of trees. I break a little cube out of this old oak stump, which was sawed off some thirty years ago, and which has about one hundred rings, — a piece sharply square-cornered and exactly the form of a square bunch of matches; and, the sawed end being regularly channelled by time in the direction of the ducts and of the silver grain, it looks precisely like the loose ends, or dipped end of the bunch, and would be mistaken for such on any shelf.

Those ripple lakes lie now in the midst of mostly bare brown or tawny dry woodlands, themselves the most living objects. They may say to the first woodland flowers, We played with the north winds here before ye were born.[1]

April 10. A calm day at last, the water almost smooth and now so low that I cannot cross the meadows. So ends the spring freshet (apparently), which began (not to include the winter one) March 8th and was at its height the 17th and 18th. It has lasted a month, and to-day, too, ends the windy spell. Since the 6th (*q. v.*) there have been two days, the 7th and 8th, of strong northwest wind, and one, the 9th, of very strong and yet colder and more northerly wind than before. This makes twenty-two days of windy weather in all, reckoning only from the last still days (the 17th and 18th of March) and not including to-day. Of these, eleven days have been of very strong and cold northwest wind,

[1] [Channing, p. 95.]

the last, or yesterday, more northerly, — except the first, when the wind was southwest, — seven of strong wind and generally northwest, and four only of moderate wind. We had rain on the 18th, 22d, 24th, 25th, 29th of March, and 3d of April, and always with an easterly or southerly wind; or as often as the wind came from the east or south it brought rain, with generally considerable wind driving it, and it invariably cleared off cold with a wind from the northwest. The wind has regularly gone down with the sun, and risen again with it. It has been so strong as to interfere with all outdoor occupations. Yet I have not observed a single tree which was blown down by it.

P. M. — Paddle to Well Meadow.

I see some remarkable examples of meadow-crust floated off on the A. Wheeler meadow and above, densely covered with button-bushes and willows, etc. One sunk in five feet of water on a sandy shore, which I must examine again.

I hear of a cinquefoil found in bloom on the 8th. It was in this sprout-land, where it was protected. This, with bluets, mouse-ear, and *Viola ovata* (of the herbaceous plants), I should call pasture flowers (among those of March and April).

I might class the twenty-two herbaceous flowers which I have known to be open before the first of May thus: —

Garden flowers	Chickweed and shepherd's-purse.
Meadow flowers	Skunk-cabbage, caltha, chrysosplenium, dandelion, strawberry, *Viola cucullata*, *Ranunculus repens* (?).
Rock flowers	Saxifrage, crowfoot, columbine, and tower-mustard.

Woodland flowers Epigæa, anemone, and thalictrum.
Pasture flowers Cinquefoil, bluets, mouse-ear, and *Viola sagittata.*
Water flowers *Callitriche verna* and nuphar.

The woody plants — trees and shrubs — might be arranged under three heads, *viz.:* —

Wet Land	*Dry Land*	*Intermediate*
Alders, both (?)	Aspens	Elms
White maple	Hazels	Red maple
Most willows	Arbutus	Peach
Sweet-gale	(?) Arbor-vitæ	Abele
Benzoin	Red cedar	Cultivated cherry
Cassandra	Fir-balsam	
White alder [?]	(?) Sweet-fern	
Larch	Shad-bush	
	Salix humilis	
	S. tristis	
	S. rostrata	
	Yew	

The hellebore buds [?] are quite conspicuous and interesting to-day, but not at all unrolled, though six or eight inches high.

The *Alnus serrulata* appears to grow on drier land than the other sometimes.

See a kingfisher flying very low, in the ricochet manner, across the water. Sheldrakes and gulls and black ducks still.

Hear the first stuttering frog croak — probably *halecina* — in the last Cassandra Pond.

April 11. Rain all day.

April 12. Clears up in afternoon.

P. M. — Paddle to Cliffs.

I saw a minnow on the 10th which looked like a

young brook minnow, not one inch long. When was it spawned?

The small alder (*A. serrulata*) is sometimes yellow-flowered, sometimes reddish-flowered. It grows with the *incana* at Cardinal Shore.

I see where the musquash has eaten the white base of the pontederia leaves. I first perceived the pickerel dart on the 10th, the river having gone down so much that you could not cross the meadows, and that being the first really warm and pleasant day since March 17th.

Saw a duck, apparently a sheldrake, at the northeast end of Cyanean Meadow. It disappeared at last by diving, and I could not find it. But I saw what looked like a ripple made by the wind, which moved slowly down the river at least forty rods toward the shore and there disappeared. Though I saw no bird there, I suspect that the ripple was made by it. Two sheldrakes flew away from this one when first observed. Why did this remain? Was it wounded? Or can those which dart so swiftly across the river and dive be another species and not the young of the season or females of the common one? Is it not, after all, the red-breasted merganser, and did I not see them in Maine?

I see half a dozen sheldrakes very busily fishing around the base of Lupine Hill or Promontory. There are two full-plumaged males and the rest females, or perhaps some of them young males. They are coasting along swiftly with their bodies sunk low and their heads half under, looking for their prey, one behind another, frequently turning and passing over the same ground

again. Their crests are very conspicuous, thus: When one sees a fish he at first swims rapidly after it, and then, if necessary, flies close over the water after it, and this excites all the rest to follow, swimming or flying, and if one seizes the fish, which I suspect is commonly a pickerel, they all pursue the lucky fisher, and he makes the water fly far in his efforts to get away and gulp down his fish. I can see the fish in his bill all the while, and he must swallow it very skillfully and quickly, if at all. I was first attracted to them by seeing these great birds rushing, shooting, thus swiftly through the air and water and throwing the water high about them. Sometimes they dive and swim quietly beneath, looking for their game. At length they spy me or my boat, and [I] hear a faint quack indicative of alarm, and suddenly all arise and go off. In the meanwhile I see two black ducks sailing with them along the shore. These look considerably smaller, and of course carry their heads more erect. They have a raw, gosling look beside the others, and I see their light bills against their dusky necks and heads. At length, when I get near them, I hear their peculiar quack also, and off they go. The sheldrakes appear to be a much more lively bird than the black duck. How different from the waddling domestic duck! The former are all alive, eagerly fishing, quick as thought, as they need to be to catch a pickerel.

I look again at the meadow-crust carried off by the ice. There is one by the railroad bridge, say three rods by one, covered with button-bushes and willows. Another, some five rods by three, at the south end of

Potter Swamp Meadow, also covered densely with button-bushes, etc. It is far from the river, by the edge of the wood. Another, and the most interesting one, lies up high some thirty rods north of this near the wood-side and fifteen rods from the river. I measure it with a tape. It is rudely triangular and about four rods on a side, though the sides are longer on the convex line. As well as the other, it is from one to three feet thick and very densely covered with button-bushes, with a few black and other willows and late roses from four to seven feet high. As dense and impassable as any kind of thicket that we have, and there are, besides, countless great yellow and white lily and pontederia roots in it. It is a large and densely bushy island in the meadow. It would surprise any one to behold it. Suppose that you were to find in the morning such a slice of the earth's crust with its vegetation dropped in your front yard, if it could contain it. I think we should not soon hear the last of it. It is an island such as might almost satisfy Sancho Panza's desires. It is a forest, in short, and not a very small one either. It is Birnam wood come to Dunsinane. It contained at least eight square rods.

There was another piece covered in like manner, some five rods long and three wide, sunk off Cardinal Shore on a hard sandy bottom, and so deep that its whole size did not appear above water. I could not touch the bottom with my oars on the outside. This no one would have detected for an immigrant or newcome land unless very familiar with the shore, for if the raw edge is concealed it looks exactly as if it grew

there like the others near by. There was a strip without anything but grass on it, some five rods long by twenty feet wide, and two pieces making as much more in length end to end with it on the [*sic*]. In all there must have been from a third to half an acre on this single meadow, which came from far up-stream, I could not tell from where. I saw more up the stream, and they were all dropped nearly in a line on the east side for half a mile or more.

Such revolutions can take place and none but the proprietor of the meadow notice it, for the traveller passing within sight does not begin to suspect that the bushy island which he sees in the meadow has floated from elsewhere, or if he saw it when on its voyage, he would not know it for a voyager. In one year all the raw edge is concealed, and the vegetation thus transplanted does not appear to find it out. These must have been carried off about the 16th of March or when the river broke up, perhaps in that strong southwest wind of the 19th. The ice, being eighteen or twenty inches thick and having ten thousand strong handles to take hold by, aided too often by the lightness of the frozen meadow, can easily lift these masses, and if there were rocks imbedded in them, would move them also. For the cake of ice may be a dozen rods or more in breadth. These have generally grounded high on the meadows, where the lilies, etc., will all die. Indeed, most of them have already been killed by frost, and probably the button[-bush] will much of it die too. Also that which has sunk in deep water will die. I saw one piece a rod wide nearly in the middle of the river, and detected it only

by the top [of] a few twigs seen above the surface. The willows or osiers will do well, and the roses, wherever they may lodge on the banks or in the meadow, but the button-bush must stand immediately on the edge of the river or other water, and there they are most likely to be placed.

The present islands, bushy or wooded, in the meadow have no doubt commonly had this origin. The soil is there doubled, and so elevated, and the plants set out at the same time. The surface being at once elevated one to three feet for four rods or more, though the button-bush dies, willows will live and maples and alders, etc., spring up there. When the flood comes with icy hands you have got a mighty lifter at work. Black willows ten feet high and these four or five rods of button-bushes are all taken up together with their soil and carried upright and without jarring to a new locality half a mile or more distant.

I observe that different meadows are at different levels above the river. The great Sudbury meadows are low. Cyanean Meadow is generally higher than the ammannia meadow. I can cross the last still, but not the first. The surface has been much taken off the last by the ice, and perhaps more has lodged on the other. Mantatuket Meadow appears to be about the height of Cyanean Meadow generally, or hardly so low. The Potter Swamp Meadow is lower than any that I have named in Concord. Perhaps those valleys parallel with the river are where the water has swept off the meadow-crust the most, and not old channels? It is evident that this transportation of the meadow

surface affects the relative height of the meadows very much.

Some meadows are now saved by the causeways and bridges and willow-rows. Though there were a hundred pieces in Potter Swamp Meadow, there were none in the meadow this side the causeway. Probably more meadow, etc., was transported two hundred years ago than to-day there, when the river, at high water especially, was less obstructed. This is the origin of almost all inequalities of surface in the meadows, and it is impossible to say how many of the clumps of bushes you see there have been thus transplanted.

As for that mass which sunk in deep water off Cardinal Shore, the cake of ice which transported it may have struck the shore many rods from its burden and melted in that position.

Consider what a new arrangement of the clumps in the mead is thus made every year. The revolution from each source is now confined to the space between two causeways and bridges, or two willow-rows, while formerly it was only confined by the form or dimensions of the meadow.

I find, on that most interesting mass of meadow and button-bushes, or the top of a sort of musquash-mound, a very peculiar stercus, precisely like a human one in size and form and color externally, so that I took it for such. But it was nearly inodorous and contained some fish-scales, and it was about the color of fireproof-brick dust within. I think it was that of an otter, quite fresh.

I hear that the epigæa is no more forward than on the 8th.

Pine warblers heard in the woods by C. to-day. This, except the pigeon woodpecker and pigeon and hawks, as far as they are migratory, is the first that I should call woodland (or dry woodland) birds that arrives. The red-wings generally sit on the black willows and the swamp white oaks and maples by the water, and sing *o-gurgle-ee* this evening, as if glad to see the river's brink appearing again and smooth waters also. The grackles are feeding on the meadow-edge.

April 13. A little snow fell on the 11th with the rain, and on some very warm banks, the south sides of houses and hills, the grass looked quite green by contrast in spots.

The streets are strewn with the bud-scales of the elm, which they, opening, have lost off, and their tops present a rich brown already. I hear a purple finch on one, and did I not hear a martin's[1] rich warble also? The birds are not so early now as I should have expected. Were they not deterred from coming north by the very strong and cold northwest wind, notwithstanding that the ground has been bare so long? The *Salix purpurea* will hardly open for five days yet.[2]

P. M. — Paddle to Ball's Hill and sail back.

I see the small botrychium fresh and yellow still, so it is as much an evergreen as any fern.

It is pleasant and pretty warm. To-day is the awakening of the meadows now partly bare. I hear the stuttering note of probably the *Rana halecina* (see one by shore) come up from all the Great Meadow,

[1] Probably a white-bellied swallow. [2] *Vide* 22d.

especially the sedgy parts, or where the grass was not cut last year and now just peeps above the surface. There is something soothing and suggestive of halcyon days in this low but universal breeding-note of the frog. Methinks it is a more unmistakable evidence of warmer weather — of the warmest we have at this date — than almost anything else. The hylodes and wood frogs are other degrees on the thermometer of the season, indicating that the weather has attained a higher temperature than before and winter fairly ended, but *this* note marks what you may call April heat (or spring heat).

I see no ducks on the meadows to-day, perhaps because there is so much less water and it is so fair.

Saw a great bird flying rather low and circling more or less over the Great Meadows, which I at first thought was a fish hawk, having a fair sight of it from Ball's Hill, but with my glass I saw that it was a gull, but, I should say, wholly slate-color and dark at that, — though there may have been small spots which made no impression of another color. It was at least as large, maybe larger than the herring gull. Was it the saddle-back gull?

Is that a potamogeton, or a pontederia, or a sium, coming up so thickly now on the bottom of the river near the shore, especially on a grassy bottom, with two little roundish leafets becoming spatulate, and a seed triangular and pointed with one side more flat than the others?

April 14. Wind was easterly yesterday; hence snow

and rain to-day. I think that this is the seventh rain-storm (as I reckon), beginning with the 18th of March, which resulted from the wind becoming easterly on the previous day, after having been in each instance but one northwest the day before, and that once the previous day was quite calm.

There are many worm holes or piles in the door-yard this forenoon. How long?

Transplanting currant bushes to-day, I find that, though the leaf-buds have not begun to open, white shoots have shot up from the bottom of the stocks two to four inches, far below the surface as yet, and I think that they have felt the influence of the season, not merely through the thawed ground, but through that portion of the plant above ground. There is this growth at the root in early spring, preceding any visible growth above ground.

April 15. Ground white with snow this morning, but it melts in a few hours, and, the sun coming out, I observe, after it is gone, much bluish vapor curling up from plowed ground, looking like a smoke there, but not from ground not recently plowed or from grass ground. Is it that the plowed ground is warmer, or merely that it has absorbed more moisture? Perhaps the sun penetrates it and so warms it more, since it lies up lighter. It is a very noticeable phenomenon, at any rate, that only the ground just plowed thus smokes.

P. M. — To Cliffs and Well Meadow.

There is quite a shimmer in the air, the day being

pretty warm, but methinks it is a little greater over plowed ground than over sod, but I see it in woods as high as the tree-tops. M. [?] Pratt refers it chiefly to heat, as about a stove, and thinks I should [see] the most over the driest sand, and it occurs to me that if it is chiefly owing to evaporation I ought to see considerable over water, but I believe that I do not. Carpenter refers it (in part, at least) to the exhalation of plants, but they are not now exhaling, — not leafed or leafing as yet. I am uncertain, therefore, whether to regard [*sic*] the earliest shimmer in the spring, on pleasant days, to heated air in motion or to vapor raised by heat into the air. (*Vide* back to April 10th.)

I see and hear white-bellied swallows as they are zigzagging through the air with their loud and lively notes. I am pretty sure it was these and not the martin I heard on the 13th.

The bay-wing now sings — the first I have been able to hear — both about the Texas house and the fields this side of Hayden's, both of them similar dry and open pastures. I heard it just before noon, when the sun began to come out, and at 3 P. M., singing loud and clear and incessantly. It sings with a pleasing deliberation, contrasting with the spring vivacity of the song sparrow, whose song many would confound it with. It comes to revive with its song the dry uplands and pastures and grass-fields about the skirts of villages. Only think how finely our life is furnished in all its details, — sweet wild birds provided to fill its interstices with song! It is provided that while we are employed in our corporeal, or intellectual, or other,

exercises we shall be lulled and amused or cheered by the singing of birds. When the laborer rests on his spade to-day, the sun having just come out, he is not left wholly to the mercy of his thoughts, nature is not a mere void to him, but he can hardly fail to hear the pleasing and encouraging notes of some newly arrived bird. The strain of the grass finch is very likely to fall on his ear and convince him, whether he is conscious of it or not, that the world is beautiful and life a fair enterprise to engage in. It will make him calm and contented. If you yield for a moment to the impressions of sense, you hear some bird giving expression to its happiness in a pleasant strain. We are provided with singing birds and with ears to hear them. What an institution that! Nor are we obliged to catch and cage them, nor to be bird-fanciers in the common sense. Whether a man's work be hard or easy, whether he be happy or unhappy, a bird is appointed to sing to a man while he is at his work.

Consider how much is annually spent on the farmer's life: the beauty of his abode, which has inspired poets since the world was made; the hundreds of delicate and beautiful flowers scattered profusely under his feet and all around him, as he walks or drives his team afield, — he cannot put his spade into uncultivated, nor into much cultivated, ground without disturbing some of them; a hundred or two of equally beautiful birds to sing to him morning and evening, and some at noonday, a good part of the year; a perfect sky arched over him, a perfect carpet spread under him, etc., etc.! And can the farmer speak or think carelessly

of these gifts? Will he find it in his heart to curse the flowers and shoot the birds?

Hear a goldfinch, after a loud mewing on an apple tree, sing in a rich and varied way, as if imitating some other bird.

Observe in the small shallow rills in the sandy road beyond the Smallpox Burying-Ground, made by the snow of the morning, now melted, very interesting ripples over a pebbly or uneven bottom on this side or that. The beauty of these little ripples was occasioned by their shadows amid the bright water. They were so arranged with remarkable order as to resemble the bright scales of a portion of a snake's skin, thus:

with geometrical regularity, seven or eight parallel rows in a triangular form, successively diminishing in size. The ripple is occasioned merely by the impetuosity of the water meeting some slight obstacle. Thus you see in the very ripples on a rill a close resemblance in arrangement to the bright scales of a fish, and it [would] greatly help to conceal a fish if it could lie under them. The water was generally less than an inch deep on a sandy bottom.

The warm pine woods are all alive this afternoon with the jingle of the pine warbler, the for the most part invisible minstrel. That wood, for example, at the Punk Oak, where we sit to hear it. It is surprising how quickly the earth, which was covered half an inch deep this morning, and since so wet, has become comparatively dry, so that we sit on the ground or on the dry leaves in woods at 3 P. M. and smell the pines and see and

hear the flies, etc., buzz about, though the sun did not come out till 12 M. This morning, the aspect of winter; at mid-forenoon, the ground reeking with moisture; at 3 P. M., sit on dry leaves and hear the flies buzz and smell the pines! That wood is now very handsome seen from the westerly side, the sun falling far through it, though some trunks are wholly in shade. This warbler impresses me as if it were calling the trees to life. I think of springing twigs. Its jingle rings through the wood at short intervals, as if, like an electric shock, it imparted a fresh spring life to them.[1] You hear the same bird, now here now there, as it incessantly flits about, commonly invisible and uttering its simple jingle on very different keys, and from time to time a companion is heard farther or nearer. This is a peculiarly summer-like sound. Go to a warm pine wood-side on a pleasant day at this season after storm, and hear it ring with the jingle of the pine warbler.

As I sit on the stump of a large white pine which was sawed off, listening to these warblers, in a warm sun, I see a fair-weather cloud going over rather low, and hear the flies buzz about me, and it reminds me of those long-drawn summer days when you lie out-of-doors and are more related to the clouds travelling over. The summer clouds, the thunder-cloud especially, are nearer to us than the clouds of winter.

When we go huckleberrying, the clouds are our fellow-travellers, to greet or avoid. I might say the clouds have come. I perceive that I am in the same apartment with them.

[1] [Channing, p. 95.]

Going up a mountain is like travelling half a day through a tan-yard, till you get into a fog, and then, when the fog blows away, you discover yourself and a buzzing fly on the sunny mountain-top.

The wood thrush! At Well Meadow Head. Not being prepared to hear it, I thought it a boy whistling at first. Also a catbird mews?[1]

The epigæa opened, apparently, the 13th.

April 16. Sheldrakes yet on Walden, but I have not identified a whistler for several weeks, — three or more.

April 17. *Sunday.* P. M. — Up Assabet.

The river, which had got down on the 10th so that I could not cross the meadows, is up again on account of snow and rain, so that I push with difficulty straight to Mantatuket's Rock, but, I believe, is already falling. Many grackles and robins are feeding on those strips of meadow just laid bare. It is still rather cold and windy, and I listen for new birds under the lee of the Rock woods in vain; but I hear the hum of bees on a willow there, and this fine susurrus makes the weather seem warmer than it is. At the same time I hear the low stuttering of the *Rana halecina* from the Hunt meadow (call it the Winthrop meadow).

How pleasing and soothing are some of the first and least audible sounds of awakened nature in the spring, as this first humming of bees, etc., and the stuttering of frogs! They cannot be called musical, — are no

[1] Could this have been a goldfinch? (Not seen.)

more even than a noise, so slight that we can endure it. But it is in part an expression of happiness, an ode that is sung and whose burden fills the air. It reminds me of the increased genialness of nature. The air which was so lately void and silent begins to resound as it were with the breathing of a myriad fellow-creatures, and even the unhappy man, on the principle that misery loves company, is soothed by this infinite din of neighbors. I have listened for the notes of various birds, and now, in this faint hum of bees, I hear as it were the first twittering of the bird Summer. Go ten feet that way, to where the northwest wind comes round the hill, and you hear only the dead mechanical sound of the blast and your thoughts recur to winter, but stand as much this way in the sun and in the lee of this bush, and your charmed ears may hear this faint susurrus weaving the web of summer. The notes of birds are interrupted, but the hum of insects is incessant. I suppose that the motion of the wings of the small tipulidæ which have swarmed for some weeks produced a humming appreciated by some ears. Perhaps the phœbe heard and was charmed by it. Thus gradually the spaces of the air are filled. Nature has taken equal care to cushion our ears on this finest sound and to inspire us with the strains of the wood thrush and poet. We may say that each gnat is made to vibrate its wings for man's fruition. In short, we hear but little music in the world which charms us more than this sound produced by the vibration of an insect's wing and in some still and sunny nook in spring.

A wood tortoise on bank; first seen, water so high.

I heard lately the voice of a hound hunting by itself. What an awful sound to the denizens of the wood! That relentless, voracious, demonic cry, like the voice of a fiend! At hearing of which, the fox, hare, marmot, etc., tremble for their young and themselves, imagining the worst. This, however, is the sound which the lords of creation love to accompany and follow, with their bugles and "mellow horns" conveying a similar dread to the hearers instead of whispering peace to the hare's palpitating breast.

A partridge drums.

April 18. 8 A. M. — To the south part of Acton, surveying, with Stedman Buttrick.

When B. came to see me the other evening, and stood before the door in the dark, my mother asked, "Who is it?" to which he replied, quite seriously, "Left-tenant [*sic*] Stedman Buttrick."

B. says that he shot some crossbills which were opening pine cones in the neighborhood of the Easterbrook place some years ago, that he saw two *dildees* [*sic*] here as much as a month ago at least, and that they used to breed on that island east of his house, — I think he called it Burr's Island. He sees the two kinds of telltale here. Once shot an eider duck here. Has often shot the pintail (he calls it spindle-tail) duck here. Thinks he has killed four (?!) kinds of teal here. Once shot a sheldrake which had a good-sized sucker in its throat, the tail sticking out its bill, so that, as he thought, it could not have flown away with it. It was a full-plumaged male. Once, in the fall, shot a mackerel

gull on what I call Dove Rock. Once shot a *whole flock* of little ducks not more than two thirds the size of a pigeon, yet full-grown, near the junction of the two rivers. Also got two ducks, the female *all* white and the male with a long and conspicuous bottle-green crest above the white. Looked through Audubon, but could find no account of them. Sees two kinds of gray ducks, one larger than a black duck. Has seen the summer duck here carrying its young to the water in her bill, as much as thirty rods. Says that teal have bred here.

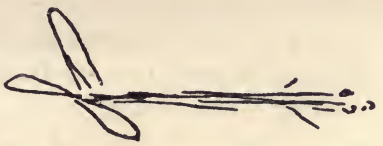
His boy found, one February, as much as a peck of chestnuts in different parcels within a short distance of one another, just under the leaves in Hildreth's chestnut wood, placed there, as he says, by the chip-squirrel, which they saw eating them. He has seen the cross fox here.

I am looking for acorns these days, to sow on the Walden lot, but can find very few sound ones. Those which the squirrels have not got are mostly worm-eaten and quite pulverized or decayed. A few which are cracked at the small [end], having started last fall, have yet life in them, perhaps enough to plant. Even these look rather discolored when you cut them open, but Buttrick says they will do for pigeon-bait. So each man looks at things from his own point of view. I found by trial that the last or apparently sound acorns would always sink in water, while the rotten ones would float, and I have accordingly offered five cents a quart for such as will sink. You can thus separate the good from the bad in a moment. I am not sure,

however, but the germs of many of the latter[1] have been injured by the frost.

Hear a field sparrow.

Ed. Emerson shows me his aquarium. He has two minnows from the brook, which I think must be the banded minnow; a little more than an inch long with very conspicuous broad black transverse bars. Some *Rana sylvatica* spawn just begun to flat out. Also several kinds of larvæ in the water, — one very like a dragon-fly, with three large feather-like appendages to the tail, small gyrinus, which he says nibbled off the legs of the skater (?), etc., etc., but no dragon-fly grubs. Two salamanders, one from Ripple Lake and the other from the pool behind my house that was. One some four inches long, with a carinated and waved (crenated) edged tail as well as light-vermilion spots on the back, evidently the *Salamandra dorsalis*. (This I suspect is what I called *S. symmetrica* last fall.) (This is pale-brown above.) The other two thirds as large, a very handsome bright orange salmon, also with vermilion spots, which must be the true *S. symmetrica*. Both thickly sprinkled with black dots. The latter's tail comparatively thick and straight-edged.



Haynes (Heavy) says that trout spawn twice in a year, — once in October and again in the spring.

[1] [That is, such as will sink. The sentence "You . . . moment" was written afterward and inserted over a caret.]

Saw snow ice a yard across to-day under the north side of a wood.

April 19. Was it a vireo I heard this forenoon on the elms?

Channing sees the same small flock of sheldrakes, three birds, in Walden still. They have been there a week or two, but I cannot see them the 22d.

P. M. — Began to set white pines in R. W. E.'s Wyman lot.

April 20. Hear and see my ruby-crowned or crested wren singing at 6 A. M. on Wheildon's pines.

Setting pines all day.

April 21. Setting pines all day. This makes two and a half days, with two men and a horse and cart to help me. We have set some four hundred trees at fifteen feet apart diamondwise, covering some two acres. I set every one with my own hand, while another digs the holes where I indicate, and occasionally helps the other dig up the trees. We prefer bushy pines only one foot high which grow in open or pasture land, yellow-looking trees which are used to the sun, instead of the spindling dark-green ones from the shade of the woods. Our trees will not average much more than two feet in height, and we take a thick sod with them fifteen to eighteen inches in diameter. There are a great many more of these plants to be had along the edges and in the midst of any white pine wood than one would suppose. One man charged us five or six cents for them

about a mile and a half distant! Got about one hundred and twenty from George Heywood's land and the rest from the Brister lot and this Wyman lot itself.

R. W. E. has bought a quarter of a pound of white pine seed at $4.00 per pound.

We could not dig up pines on the north side of the wood on the Brister lot to-day on account of frost! Though we had quite forgotten it, and put the winter so far behind us.

See the *Vanessa Antiopa*. C. has seen it a week or so. C. sees a cicindela to-day. I hear of a robin's nest begun, and that geese go over to-day.

Put out a fire in the woods, the Brister lot. Quite a warm day.

Storer's account of the salamanders concludes with these words, "All the salamanders here described, feed upon insects, which they devour in very large numbers, and hence their utility cannot be questioned." The same might be said in behalf of the creatures that devour the salamanders.

In those little Ripple Lakes in the cool hollows in the woods, there you find these active bright-spotted salamanders, — *S. dorsalis*, the brown (olive-brown or palish-brown), with carinated and wave-crenate thin tail, and the *S. symmetrica*, the bright orange salmon, with a thick, straight-edged tail, — both with vermilion spots on back and countless fine black dots above and beneath. The first-named is quite voracious, catching many of the larvæ in the aquarium, in fact depopulating it. He gulps them down very deliberately after catching them.

What pretty things go to make up the sum of life in

any valley! This Ripple Lake with the wind playing over it, the bright spotted butterflies that flutter from time to time over the dry leaves, and the minnows and salamanders that dart in the water itself. Beneath this play of ripples which reflect the sky, — a darker blue than the real, — the vermilion-spotted salamanders are darting at the various grotesque-formed larvæ of the lake.

April 22. The *Salix purpurea* in prime, out probably three or four days; say 19th. Arbor-vitæ, how long?

P. M. — In a fine rain, around Walden.

I go by a *Populus grandidentata* on the eastern sand slope of the Deep Cut just after entering, whose aments (which apparently here began to shed pollen yesterday) in scattered clusters at the ends of the bare twigs, but just begun to shed their pollen, not hanging loose and straight yet, but curved, are a very rich crimson, like some ripe fruit, as mulberries, seen against the sand. I cannot represent the number in a single cluster, but they are much the handsomest now before the crimson anthers have burst, and are all the more remarkable for the very open and bare habit of the tree.

When setting the pines at Walden the last three days, I was sung to by the field sparrow. For music I heard their jingle from time to time. That the music the pines were set to, and I have no doubt they will build many a nest under their shelter. It would seem as if such a field as this — a dry open or half-open pasture in the woods, with small pines scattered in it — was well-nigh, if not quite, abandoned to this one alone

among the sparrows. The surface of the earth is portioned out among them. By a beautiful law of distribution, one creature does not too much interfere with another. I do not hear the song sparrow here. As the pines gradually increase, and a wood-lot is formed, these birds will withdraw to new pastures, and the thrushes, etc., will take their place. Yes, as the walls of cities are fabled to have been built by music, so my pines were established by the song of the field sparrow. They commonly place their nests here under the shelter of a little pine in the field.

As I planted there, wandering thoughts visited me, which I have now forgotten. My senses were busily suggesting them, though I was unconscious of their origin. *E. g.*, I first *consciously* found myself entertaining the thought of a carriage on the road, and directly after I was aware that I heard it. No doubt I had heard it before, or rather my ears had, but I was quite unconscious of it, — it was not a fact of my then state of existence; yet such was the force of habit, it affected my thoughts nevertheless, so double, if not treble, even, are we. Sometimes the senses bring us information quicker than we can receive it. Perhaps these thoughts which run in ruts by themselves while we are engaged in some routine may be called automatic. I distinctly entertained the idea of a carriage, without the slightest suspicion how it had originated or been suggested to my mind. I have no doubt at all that my ears had heard it, but my mind, just then preoccupied, had refused to attend to it. This suggests that most, if not all, indeed, of our ideas may be due

to some sort of sensuous impression of which we may or may not be conscious.

This afternoon there is an east wind, and a rain-storm accordingly beginning, the eighth of the kind with this wind.

I still see a large flock of grackles.

Within a few days I pricked my fingers smartly against the sharp, stiff points of some sedge coming up. At Heywood's meadow, by the railroad, this sedge, rising green and dense with yellow tips above the withered clumps, is very striking, suggesting heat, even a blaze, there.

Scare up partridges feeding about the green springy places under the edge of hills. See them skim or scale away for forty rods along and upward to the woods, into which they swiftly scale, dodging to right and left and avoiding the twigs, yet without once flapping the wings after having launched themselves.

April 23. Rain, rain.

Hear seringo, by chance the first, and while it rains. The tree sparrows abundant and singing in the yard, but I have not noticed a *hyemalis* of late. The field sparrow sings in our yard in the rain.

The sidewalk is all strewn with fishworms this forenoon, up and down the street, and many will evidently die in the cold rain. Apparently the rain tempted them to remain on the surface, and then the cold and wet benumbs and drowns them. Some of them are slowly crawling across the paths. What an abundant supply of food for the birds lately arrived! From Gil-

bert White, and the notes by others to his last edition, I should infer that these were worms which, having been tempted out in unusual numbers by the rain, lost their way back to their holes. They say that they never take their tails out of their holes.

In about five quarts of scarlet oak acorns gathered the other day there [were] only some three gills that had life in them, or say one in seven. I do not know how many the squirrels had got, but as it was quite near a house, a tree by itself, I think not a great many. The rest were apparently destroyed by worms; so that I should say the worms destroyed before spring three fourths of them. As the grub is already in the acorn, it may be just as well (except for the squirrels) to sow them now as in the fall, whatever you can get.

Clears up at 3 P. M., and a very strong south wind blows.

I go on the water. I frequently observe that the waves do not always run high in proportion to the strength of the wind. The wind seems sometimes to flat them down, perhaps when it blows very hard in gusts, which interrupt a long roll.

What is that small willow on the north side of S. Brown's stump, which apparently began to open two days ago?

A large hickory by the wall on the north side (or northeast side) of the hill apparently just blown down, the one I saw the screech owl go into two or three years ago. I think it may have fallen in this very high wind which arose within an hour; at any rate it has fallen since the grass began to spring, for the owl-hole con-

tains a squirrel's nest made of half-green grass somewhat withered, which could only have been found quite recently, and also the limbs have been driven so deep into the ground that I cannot pull them out, which shows that the ground was thawed when it fell; also the squirrel's nest, which is perfectly sheltered, now the tree is fallen, was quite wet through with rain, that of the morning, as I think. This nest, which I suppose was that of a red squirrel, was at the bottom of a large hole some eighteen inches deep and twenty-five feet from the ground, where a large limb had been broken off formerly. An opening on the side had been stopped with twigs as big as a pipe-stem and larger, some of them the hickory twigs quite green and freshly gnawed off with their buds, forming a rude basketwork which kept up and in the grass and rotten wood, four or five handfuls of which, mixed with the rotten wood of the inside, composed the nest. This was the half old and withered and half green grass gathered a few days since about the base of the tree.

April 24. *Sunday.* P. M. — To Pine Hill and Heywood's meadow.

The weather is windy still and cool. I see for several days past tipulidæ of larger size dancing like the small.

A great many oak leaves have their petioles broken off half an inch or more from the base, so that the leaves fall before they are regularly cast off by the tree. I see many young oaks — a scarlet one this afternoon — the half of whose petioles have been thus broken

mechanically by the force of the wind on the blade of the leaf in the winter. These stub ends will, [of] course, be cast soon, like the entire leaves. Thus you may have small trees entirely divested of their leaves excepting a fragment of the petioles by merely mechanical means or violence, long before they have all fallen regularly. They are whirled about by the wind till they break off, and these broken and stringy petioles give to the tree a ragged appearance.

I notice that the white pine cones in Wheildon's grove have now almost entirely fallen.

There is a season for everything, and we do not notice a given phenomenon except at that season, if, indeed, it can be called the same phenomenon at any other season. There is a time to watch the ripples on Ripple Lake, to look for arrowheads, to study the rocks and lichens, a time to walk on sandy deserts; and the observer of nature must improve these seasons as much as the farmer his. So boys fly kites and play ball or hawkie at particular times all over the State. A wise man will know what game to play to-day, and play it. We must not be governed by rigid rules, as by the almanac, but let the season rule us. The moods and thoughts of man are revolving just as steadily and incessantly as nature's. Nothing must be postponed. Take time by the forelock. Now or never! You must live in the present, launch yourself on every wave, find your eternity in each moment. Fools stand on their island opportunities and look toward another land. There is no other land; there is no other life but this, or the like of this. Where the good husbandman is,

there is the good soil. Take any other course, and life will be a succession of regrets.[1] Let us see vessels sailing prosperously before the wind, and not simply stranded barks. There is no world for the penitent and regretful.

On the Mill-Dam a man is unmanned. I love best to meet them in the outskirts. They remind me of wharf rats in the other place. Let me see man a-farming, a-hunting, a-fishing, a-walking, — anything but a-shopping. Farmers' coats are ugly in the shops and on the Mill-Dam, but become them in the fields.

Dr. B. asked me what I found that was new these days, if I was still looking after the beautiful. I told [him] yes, and that I wished to hire two or three good observers.

With what energy Nature carries out her plans! I see white birches six or eight feet high growing in the seams of rocks three or four feet from the ground, in the midst of a sprout-land. If men will not let them grow on the surface of the earth, Nature can still maintain the species by dropping seeds into the seams of the rocks. By their growth, probably, they help to split the rocks. How often seeds appear to catch and take root in what we should have deemed the most unfavorable place! Deep in the seam of a rock the seed is out of the way of birds and squirrels.

For several weeks past I have noticed stumps which had had their bark stripped off, I think by skunks on their nightly rounds.

Sitting on Lightning Hillside and looking over Hey-

[1] [Channing, p. 85.]

wood's meadow, I am struck by the vivid greenness of the tips of the sedge just pushing up out of its dry tussocks in the water. I observed it here on the 22d. It is some six inches high or more.[1] All the lower, or the greater, part of the tussock is

brown and sere and prostrate withered blades of last year, while from the top spring up ranks of green life like a fire, from amid the withered blades. This new grass is green beneath, but yellow-tipped, perhaps on account of the recent snow or higher water. It is the renewal of life. The contrast of life with death, spring with winter, is nowhere more striking. Such is the regularity [of] the growth and of the fallen grass that it affects you like a geometrical figure. The fallen dead and decaying last year's grass is dead past all resurrection, perfectly brown and lifeless, while this vivid green that has shot up from its midst close upon the heels of winter, even through snow, is like the first phalanx of Spring's forces.

The green has the regularity of a parapet or rampart to a fortress. It winds along the irregular lines of tussocks like the Wall of China over hill and dale.[2]

April 25. P. M. — To Kalmia Swamp.
First notice martins.

[1] *Carex stricta. Vide* June 19th. [2] [Channing, p. 104.]

I got to-day and yesterday the first decided impression of greenness beginning to prevail, summer-like. It struck me as I was going past some opening and by chance looked up some valley or glade, — greenness just beginning to prevail over the brown or tawny. It is a sudden impression of greater genialness in the air, when this greenness first makes an impression on you at some turn, from blades of grass decidedly green, though thin, in the sun and the still, warm air, on some warm orchard-slope perhaps. It reminds you of the time, not far off, when you will see the dark shadows of the trees there and buttercups spotting the grass. Even the grass begins to wave, in the 19th-of-April fashion.[1] When the wind is still cool elsewhere, I glance up some warm southern slope, sunny and still, where the thinly scattered blades of green grass, lately sprung, already perchance begin to wave, and I am suddenly advertised that a new season has arrived. This is the beginning of that season which, methinks, culminates with the buttercup and wild pink and *Viola pedata*. It begins when the first toad is heard.

Methinks I hear through the wind to-day — and it was the same yesterday — a very faint, low ringing of toads, as if distant and just begun. It is an indistinct undertone, and I am far from sure that I hear anything. It may be all imagination.

I see the meadow-sweet, thimble-berry (even in a swamp), high blackberry, and (on a dry rock in the woods in a sunny place) some *Vaccinium Pennsylvanicum* leafing (even the last) apparently two or three

[1] [See *Journal*, vol. xiii, p. 303.]

days. Fern scrolls are eight inches high, — beyond Hubbard Bridge on the north bank of road.

A mosquito endeavors to sting me.

Ranunculus repens at Corner Spring apparently yesterday; five of them out now. Thus early now because exposed to light. The *Viola blanda* are numerously open there, say two days at least. Also bluets and potentilla are first noticed by me, and *V. sagittata*. The more yellowish red maples of this afternoon are one, barked, northeast corner Hubbard's Dracæna Grove, the easternmost tree of the row south of Hubbard's Grove, the larger about ten rods this side Hubbard Bridge, south side. The two at this end of bridge are quite red.

I hear still the *what what what* of a nuthatch, and, directly after, its ordinary winter note of *gnah gnah*, quite distinct. I think the former is its spring note or breeding-note.

E. Bartlett has found a crow's nest with four eggs a little developed in a tall white pine in the grove east of Beck Stow's.

The snipe have hovered commonly this spring an hour or two before sunset and also in the morning. I can see them flying very high over the Mill-Dam, and they appear to make that sound when descending, — one quite by himself.

Toads have been observed or disturbed in gardens for a week. One saw a striped snake the 3d of April on a warm railroad sand-bank, — a similar place to the others I heard of.

Young Stewart tells me that he saw last year a pout's

nest at Walden in the pond-hole by the big pond. The spawn lay on the mud quite open and uncovered, and the old fish was tending it. A few days after, he saw that it was hatched and little pouts were swimming about.

April 26. Start for Lynn.

Rice says that he saw a large mud turtle in the river about three weeks ago, and has seen two or three more since. Thinks they come out about the first of April. He saw a woodchuck the 17th; says he heard a toad on the 23d.

P. M. — Walked with C. M. Tracy in the rain[1] in the western part of Lynn, near Dungeon Rock. Crossed a stream of stones ten or more rods wide, reaching from top of Pine Hill to Salem. Saw many *discolor*-like willows on hills (rocky hills), but apparently passing into *S. humilis;* yet no *eriocephala*, or distinct form from *discolor*. Also one *S. rostrata*. Tracy thought his neighborhood's a depauperated flora, being on the porphyry. Is a marked difference between the vegetation of the porphyry and the sienite.

Got the *Cerastium arvense* from T.'s garden; said to be abundant on Nahant and to have flowers big as a five-cent-piece; very like a dianthus, — the leaf. Also got the *Nasturtium officinale*, or common brook cress, from Lynn, and set it in Depot Field Brook. Neither of these in bloom. His variety *Virginica* of *Cardamine* grows on dry ground.

[1] This is the last of the rains (spring rains!) which invariably followed an east wind. *Vide* back.

April 27. Walk along Swampscott Beach from Red Rock northeast. The beach is strewn with beautifully colored purple and whitish algæ just left by the tide. Hear and see the seringo in fields next the shore. No noticeable yellow shoulder, pure whitish beneath, dashed throat and a dark-brown line of dashes along the sides of the body.[1]

Struck inland and passed over the west end of High Rock, through the cemetery, and over Pine Hill, where I heard a strange warbler, methought, a dark-colored, perhaps reddish-headed bird. Thence through East Saugus and Saugus to Cliftondale, I think in the southern part of Saugus.

The little brown snake with the light line along the back just killed in the road.

Saw at the Aquarium in Bromfield Street apparently brook minnows with the longitudinal dark lines bordered with light. A little pout incessantly nibbles at the dorsal fin of the common perch, also at apparently the mucus on its back. See the sea-raven.

Toads ring and, no doubt, in Concord also.

April 28. 8.30 A. M. — Row to Carlisle Bridge with Blake and Brown.

See black ducks and sheldrakes still. The first myrtle-bird that I have noticed. A small hawk, perhaps

[1] Ours examined the 30th is apparently or perhaps a little smaller and less distinctly whitish beneath and with a less distinct dark line on the sides, but breast equally dashed with brown. Did not see the yellow shoulder, and the head was a little less yellow. Also note of ours apparently more feeble, first part like a watch-spring, last more ringing and clear in both birds.

pigeon hawk. A gull. Sit on Ball's Hill. The water partly over the Great Meadows. The wind is northeast, and at the western base of the hill we are quite sheltered; yet the waves run quite high there and still further up the river, — waves raised by the wind beyond the hill, — while there are very slight waves or ripples over the meadow south of the hill, which is much more exposed, evidently because the water is shallow there and large waves are not so easily formed on account of friction.

S. Higginson brought me the arbutus in bloom on the 26th, one twig only out.

See a shad-fly, one only, on water.

A little snake, size of little brown snake, on pine hill, but uniformly grayish above as far as I could see.

E. Emerson's *Salamandra dorsalis* has just lost its skin.

April 29. 7 A. M. — To Walden, and set one hundred larch trees from England, all two years from seed, about nine inches high, just begun to leaf.

See and hear a black and white creeper.

First observe the dandelion well out in R. W. E.'s yard; also anemone at Sassafras Shore. Interrupted fern scrolls there, four to five inches high.

Those red maples are reddest in which the fertile flowers prevail.

Haynes was fishing for pickerel with a pole yesterday, and said that he caught several the day before, *i. e.* 27th.

April 30. P. M. — Sail to Holden Swamp.

The warmest afternoon yet. Sat in sun without fire this forenoon.

The wind has at length been easterly without rain following. Fishes, especially pickerel, lie up in greater numbers, though Haynes thinks the water is still too cold for them. See a bream. A small willow some ten rods north of stone bridge, east side, bloomed yesterday. *Salix alba* leafing, or stipules a quarter of an inch wide; probably began a day or two [ago]. *Luzula campestris* is almost out at Clamshell. Its now low purplish and silky-haired leaves are the blooming of moist ground and early meadow-edges. See two or three strawberry flowers at Clamshell.

The 27th and to-day are weather for a half-thick single coat. This old name is still useful. There is scarcely a puff of wind till I get to Clamshell; then it rises and comes from the northwest instead of northeast and blows quite hard and fresher. See a stake-driver.

Land at Holden Wood. That interesting small blue butterfly (size of small red) is apparently just out, fluttering over the warm dry oak leaves within the wood in the sun. Channing also first sees them to-day. The moment it rests and closes its wings, it looks merely whitish-slate, and you think at first that the deeper blue was produced by the motion of its wings, but the fact is you now see only their under sides which thus [*sic*] whitish spotted with black, with a dark waved line next the edge. This first *off-coat* warmth just preceding the advent of the swamp warblers (parti-colored, redstart, etc.) brings them out. I come here to listen for

warblers, but hear or see only the black and white creeper and the chickadee.

Did I not hear a tree sparrow this forenoon?

The *Viburnum nudum* around the edge of the swamp, on the northern edge of the warm bays in sunny and sheltered places, has just expanded, say two days, the two diverging leafets being an inch long nearly, — pretty yellowish-brown leafets in the sun, the most noticeable leafiness here now, just spotting and enlivening the dead, dark, bare twigs, under the red blossoms of the maples.

It is a day for many small fuzzy gnats and other small insects. Insects swarm about the expanding buds.

The viburnum buds are so large and long, like a spear-head, that they are conspicuous the moment their two leafets diverge and they are lit up by the sun. They unfold their wings like insects and arriving warblers. These, too, mark the season well. You see them a few rods off in the sun, through the stems of the alders and maples.

That small curled grass in tufts in dry pastures and hills, spoken of about a month ago, is not early sedge.

I notice under the southern edge of the Holden Wood, on the Arrowhead Field, a great many little birches in the grass, apparently seedlings of last year, and I take up a hundred and ten from three to six or seven inches high. They are already leafed, the little rugose leafets more than half an inch wide, or larger than any wild shrubs or trees, while the larger white

birches have not started. I could take up a thousand in two or three hours. I set ten in our yard.

Channing saw ducks — he thinks female sheldrakes! — in Walden to-day.

Julius Smith says he saw a little hawk kill a robin yesterday.

III

MAY, 1859

(ÆT. 41)

May 1. Hear the ruby-crowned wren.

We accuse savages of worshipping only the bad spirit, or devil, though they may distinguish both a good and a bad; but they regard only that one which they fear and worship the devil only. We too are savages in this, doing precisely the same thing. This occurred to me yesterday as I sat in the woods admiring the beauty of the blue butterfly. We are not chiefly interested in birds and insects, for example, as they are ornamental to the earth and cheering to man, but we spare the lives of the former only on condition that they eat more grubs than they do cherries, and the only account of the insects which the State encourages is of the "Insects *Injurious* to Vegetation." We too admit both a good and a bad spirit, but we worship chiefly the bad spirit, whom we fear. We do not think first of the good but of the harm things will do us.

The catechism says that the chief end of man is to glorify God and enjoy him forever, which of course is applicable mainly to God as seen in his works. Yet the only account of its beautiful insects — butterflies, etc. — which God has made and set before us which the State ever thinks of spending any money on is the account of those which are injurious to vegetation!

This is the way we glorify God and enjoy him forever. Come out here and behold a thousand painted butterflies and other beautiful insects which people the air, then go to the libraries and see what kind of prayer and glorification of God is there recorded. Massachusetts has published her report on "Insects Injurious to Vegetation," and our neighbor the "Noxious Insects of New York." We have attended to the evil and said nothing about the good. This is looking a gift horse in the mouth with a vengeance. Children are attracted by the beauty of butterflies, but their parents and legislators deem it an idle pursuit. The parents remind me of the devil, but the children of God. Though God may have pronounced his work good, we ask, "Is it not poisonous?"

Science is inhuman. Things seen with a microscope begin to be insignificant. So described, they are as monstrous as if they should be magnified a thousand diameters. Suppose I should see and describe men and houses and trees and birds as if they were a thousand times larger than they are! With our prying instruments we disturb the balance and harmony of nature.

P. M. — To Second Division.

Very warm. Looking from Clamshell over Hosmer's meadow, about half covered with water, see hundreds of turtles, chiefly *picta*, now first lying out in numbers on the brown pieces of meadow which rise above the water. You see their black backs shine on these hummocks left by the ice, fifty to eighty rods off. They would rapidly tumble off if you went much nearer.

This heat and stillness draws them up. It is remarkable how surely they are advertised of the first warm and still days, and in an hour or two are sure to spread themselves over the hummocks. There is to-day a general resurrection of them, and there they bask in the sun. It is their sabbath. At this distance, if you are on the lookout, especially with a glass, you can discover what numbers of them there are, but they are shy and will drop into the water on a near approach. All up and down our river meadows their backs are shining in the sun to-day. It is a turtle day.

As we sat on the steep hillside south of Nut Meadow Brook Crossing, we noticed a remarkable whirlwind on a small scale, which carried up the oak leaves from that Island copse in the meadow. The oak leaves now hang thinly and are very dry and light, and these small whirlwinds, which seem to be occasioned by the sudden hot and calm weather (like whirlpools or dimples in a smooth stream), wrench them off, and up they go, somewhat spirally, in countless flocks like birds, with a rustling sound; and higher and higher into the clear blue deeps they rise above our heads, till they are fairly lost to sight, looking, when last seen, mere light specks against the blue, like stars by day, in fact. I could distinguish some, I have no doubt, five or six hundred feet high at least, but if I looked aside a moment they were lost. The largest oak leaves looked not bigger than a five-cent-piece. These were drifting eastward, — to descend where? Methought that, instead of decaying on the earth or being consumed by fire, these were being translated and would soon be taken in at

the windows of heaven. I had never observed this phenomenon so remarkable. The flight of the leaves. This was quite local, and it was comparatively still where we sat a few rods on one side. Thousands went up together in a rustling flock.

Many of the last oak leaves hang thus ready to go up. I noticed two or more similar whirlwinds in the woods elsewhere this afternoon. One took up small twigs and clusters of leaves from the ground, matted together. I could easily see where it ran along with its nose (or point of its tunnel) close to the ground, stirring up the leaves as it travelled, like the snout of some hunting or rooting animal.

See and hear chewink.

See a little snake on the dry twigs and chips in the sun, near the arbutus, uniformly brown (or reddish-brown) above except a yellowish ring on the occiput, the head also lighter than the body; beneath vermilion, with apparently a row of light dots along each side. It is apparently *Coluber amœnus* (?), except that it has the yellowish ring.

Luzula campestris. Also the *Oryzopsis Canadensis* by the Major Heywood path-side, say a day, or April 30th, six inches high or more, with fine bristle-like leaves. See a thrasher.

What is that rush at Second Division? It now forms a dense and very conspicuous mass some four rods long and one foot high. The top for three inches is red, and the impression at a little distance is like that made by sorrel. Certainly no plant of this character exhibits such a growth now, *i. e.* in the mass. It

surprises you to see it, carries your thoughts on to June.

The climbing fern is persistent, *i. e.* retains its greenness still, though now partly brown and withered.

May 2. Small pewee and young lackey caterpillars.

I see on the *Salix rostrata* by railroad many honey-bees laden with large and peculiarly orange-colored pellets of its pollen.

P. M. — Up Assabet.

Those swarms of small miller-like insects which fly low over the surface of the river, sometimes constantly falling to and touching the surface and then rising again. When at rest they are seen to be blackish-winged, but flying they look light-colored. They flutter low and continuously over the same place. Theirs is a sort of dance.

A peetweet and its mate at Mantatuket Rock. The river seems really inhabited when the peetweet is back and those little light-winged millers (?). This bird does not return to our stream until the weather is decidedly pleasant and warm. He is perched on the accustomed rock. Its note peoples the river, like the prattle of children once more in the yard of a house that has stood empty.

I am surprised by the tender yellowish green of the aspen leaf just expanded suddenly, even like a fire, seen in the sun, against the dark-brown twigs of the wood, though these leafets are yet but thinly dispersed. It is very enlivening.

I heard yesterday, and perhaps for several days, the

soft purring sound of what I take to be the *Rana palustris*, breeding, though I did not this time see the frog.

I feel no desire to go to California or Pike's Peak, but I often think at night with inexpressible satisfaction and yearning of the *arrowheadiferous* sands of Concord. I have often spent whole afternoons, especially in the spring, pacing back and forth over a sandy field, looking for these relics of a race. This is the gold which our sands yield. The soil of that rocky spot on Simon Brown's land is quite ash-colored — now that the sod is turned up — by Indian fires, with numerous pieces of coal in it. There is a great deal of this ash-colored soil in the country. We do literally plow up the hearths of a people and plant in their ashes. The ashes of their fires color much of our soil.

May 3. Surveying the Bedford road.

Hear the *te-e-e* of a white-throat sparrow.

I hear of phœbes', robins', and bluebirds' nests and eggs. I have not heard any snipes boom for about a week, nor seen a tree sparrow *certainly* since April 30 (??), nor *F. hyemalis* for several days.

May 4. *Wednesday*. P. M. — To Lee's Cliff on foot.

This the fourth warm day.

The cassandra (in full bloom) swarms with little bees, and amid them is one bumblebee which they appear to molest from time to time, and afterward I see one flying high overhead at Holden Swamp.

Notice the white willows on Hubbard's Bridge cause-

way, — quite a mass of green when seen aslant from this side, and have been two or three days, but as yet no bloom there nor hum of bees. Also their freshest osiers are very bright, yet I think most of it is due to the height at which the sun runs. They are priests of the sun, report his brightness, — heliometers. We do not realize how much more light there is in the day than in winter. If the ground should be covered with snow, the reflection would dazzle us and blister our faces. This willow begins to be green before the aspens, — say five or six days ago.

It is now quite dry, especially the leaves in the woods, and this is the time for fires in the woods. I have seen the smoke of several within a week or ten days.

A small willow inside wall just beyond Conant's bars has begun to leaf two or three days. It is either *discolor* or *humilis*, having large and old fertile catkins.

Crossing that first Conantum field, I perceive a peculiar fragrance in the air (not *the* meadow fragrance), like that of vernal flowers or of expanding buds. The ground is covered with the mouse-ear in full bloom, and it may be that in part. It is a temperate southwest breeze, and this is a scent as of willows (flowers and leafets), bluets, violets, shad-bush, mouse-ear, etc., combined; or perhaps the last chiefly; at any rate it is very perceptible. The air is more genial, laden with the fragrance of spring flowers. I, sailing in the spring ocean, getting in from my winter voyage, begin to smell the land. Such a scent perceived by a mariner would be very exciting. I not only smell the land breeze, but I

perceive in it the fragrance of spring flowers. I draw near to the land; I begin to lie down and stretch myself on it. After my winter voyage I begin to smell the land.

I came out expecting to see the redstart or the parti-colored warbler, and as soon as I get within a dozen rods of the Holden wood I hear the screeper note of the tweezer-bird, *i. e.* parti-colored warbler, which also I see, but not distinctly. Two or three are flitting from tree-top to tree-top about the swamp there, and you have only to sit still on one side and wait for them to come round. The water has what you may call a summer ripple and sparkle on it; *i. e.*, the ripple does not suggest coldness in the breeze that raises it. It is a hazy day; the air is hazed, you might fancy, with a myriad expanding buds.

After crossing the Arrowhead Fields, we see a woodchuck run along and climb to the top of a wall and sit erect there, — our first. It is almost exactly the color of the ground and the wall and the bare brown twigs, all together. And when in the Miles Swamp Field we see two, one chasing the other, coming very fast down the lilac field hill straight toward [us], while we squat still in the middle of the field. The foremost is a small gray or slaty-colored one, the other two or three times as heavy and a warm tawny, decidedly yellowish in the sun, a very large and fat one, pursuing the first. I think this must be the male in pursuit of the female. Suddenly the foremost, when thirty or forty rods off, perceives us, and tries as it were to sink into the earth, and finally gets behind a low tuft of grass and peeps

out. Also the other (which at first appears to fondle the earth, inclining his cheek to it and dragging his body a little along it) tries to hide himself, and at length gets behind an apple tree and peeps out on one side in an amusing manner. This makes three that we see. They are clumsy runners, with their short legs and heavy bodies, — run with an undulating or wobbling motion, jerking up the hind quarters. Their tails were dark-tipped. They can run pretty fast, however. Their tails are low when running.

Looking up through this soft and warm southwest wind, I notice the conspicuous shadow of Middle Conantum Cliff, now at 3 P. M., and elsewhere the shade of a few apple trees, — their trunks and boughs. Through this warm and hazy air the sheeny surface of the hill, now considerably greened, looks soft as velvet, and June is suggested to my mind. It is remarkable that shadow should only be noticed now when decidedly warm weather comes, though before the leaves have expanded, *i. e.*, when it begins to be grateful to our senses. The shadow of the Cliff is like a dark pupil on the side of the hill. This first shadow is as noticeable and memorable as a flower. I observe annually the first shadow of this cliff. When we begin to pass from sunshine into shade for our refreshment; when we look on shade with yearning as on a friend. That cliff and its shade suggests dark eyes and eyelashes and overhanging brows. Few things are more suggestive of heat than this first shade, though now we see only the tracery of tree-boughs on the greening grass and the sandy street. This I notice at the same time with the first

bumblebee, when the *Rana palustris* purrs in the meadow generally, the white willow and aspen display their tender green full of yellow light, the particolored warbler is first heard over the swamp, the woodchuck, who loves warmth, is out on the hillsides in numbers, the jingle of the chip-bird is incessantly heard, the thrasher sings incessantly, the first cricket is heard in a warm rocky place, and that scent of vernal flowers is in the air. This is an intenser expression of that same influence or aspect of nature which I began to perceive ten days ago (*vide* 25th), — the same *lieferung*.

These days we begin to think in earnest of bathing in the river, and to sit at an open window. Life out of doors begins.

It would require a good deal of time and patience to study the habits of woodchucks, they are so shy and watchful. They hear the least sound of a footstep on the ground, and are quick to see also. One should go clad in a suit somewhat like their own, the warp of tawny and the woof of green, and then, with a painted or well-tanned face, he might lie out on a sunny bank till they appeared.

We hear a thrasher sing for half an hour steadily, — a very rich singer and heard a quarter of a mile off very distinctly. This is first heard commonly at planting-time. He sings as if conscious of his power.

See little apple trees just springing up in cow-dung. Under Lee's Cliff, a phœbe's nest and one egg, with apparently a cowbird's egg, — which is here, then, — but unusually long with a very broad ring of chestnut-

brown about the larger end, contrasting with the smaller flesh-colored egg of the phœbe.

The grass of the river meadows shooting up is now a glaucous green, while that of the uplands is dark-green. The former, or sedge, is [a] very erect and stiff spear, while the latter is an inclined and flexible blade.

Hear the exact note of the pe-pe once, but at the same time with the thrasher at Bittern Cliff. Could it have been the last? ?

A carex at Lee's, say May 1st, at least, with broadish flaccid glaucous leaves. Call it *C. laxiflora*-like. I can find but one tuft that has not been nibbled off by rabbits or woodchucks, so fond are they of this early grass. Two grasses are almost in flower there.[1] Gather an apparent *Viola cucullata* (*vide* press), but close under the rocks. Can it be a distinct variety?

May 5. Thursday. P. M. — To Melvin's Preserve.

Red-wings fly in flocks yet. Near the oak beyond Jarvis land, a yellow butterfly, — how hot! this meteor dancing through the air. Also see a *scalloped*-edge dark-colored butterfly resting on the trunk of a tree, where, both by its form and color, its wings being closed, it resembles a bit of bark, or rather a lichen. Evidently their forms and colors, especially of the under sides of their wings, are designed to conceal them when at rest with their wings closed.

Am surprised to find the *Viola Muhlenbergii* quite abundant beyond the bayberry and near the wall. According to my observation this year, it now stands thus

[1] Is one the sweet-scented vernal?

with the violets: the *V. ovata* is the commonest, but not abundant in one spot; the *V. Muhlenbergii* is most abundant in particular spots, coloring the hummocks with its small pale flowers; the *V. blanda* and *cucullata* are, equally, less abundant than the former, or rather rare; *V. pedata* and *lanceolata* rarer yet, or not seen.

I noticed lately where middle-sized ants, half black and half sorrel, had completely removed the pine-needles from the crown of their large hills, leaving them bare like a mountain-top.

Am struck by the beauty of the yellow birches, now fairly begun to be in bloom, at Yellow Birch, or Botrychium, Swamp. It is perhaps the handsomest tree or shrub yet in bloom (apparently opened yesterday), of similar character to the alders and poplars, but larger and of higher color. You see a great tree all hung with long yellow or golden tassels at the end of its slender, drooping spray, in clusters at intervals of a few inches or a foot. These are all dangling and incessantly waving in the wind, — a great display of lively blossoms (lively both by their color and motion) without a particle of leaf. Yet they are dense enough to reveal the outline of the tree, seen against the bare twigs of itself and other trees. The tassels of this one in bloom are elongated to two or three times the length of those of another not in bloom by its side. These dancing tassels have the effect of the leaves of the tremble. Those not quite open have a rich, dark, speckled or braided look, almost equally handsome. Golden tassels all trembling in the gentlest breeze, the only signs of life on the trees. A careless observer might not notice them at all. The re-

awakened springy life of the swamp, the product of its golden veins. These graceful pendants, not in too heavy or dense masses, but thinly dispersed with a noble moderation. Great vegetable chandeliers they stand in the swamps. The unopened catkins, some more golden, others brown or coppery, are like living worms ready to assume a winged life. These trees, which cannot stir their stumps, thus annually assume this lively color and motion.

I see and am bitten by little black flies, — I should say the same with those of Maine, — here on the Melvin Preserve. One eighth of an inch long.

Brakes are five inches high. *Poa annua* (small and flat spreading in Pratt's garden), say a week.

The sun sets red (first time), followed by a very hot and hazy day.

The wilderness, in the eyes of our forefathers, was a vast and howling place or *space*, where a man might roam naked of house and most other defense, exposed to wild beasts and wilder men. They who went to war with the Indians and French were said to have been "out," and the wounded and missing who at length returned after a fight were said to have "got in," to Berwick or Saco, as the case might be.

Veronica peregrina, Pratt's garden.

May 6. Surveying for Willis & Damon at the factory. Hear the *tea-lee* of the white-throat sparrow. It is suddenly very warm and oppressive, especially in the woods with thick clothing. *Viola pedata* begins to be common about white pine woods there.

While surveying this forenoon behind Willis's house on the shore of the mill-pond, I saw remarkable swarms of that little fuzzy gnat (*Tipulidæ*). Hot as it was, — oppressively so, — they were collected in the hollows in the meadow, apparently to be out of the way of the little breeze that there was, and in many such places in the meadow, within a rod of the water, the ground was perfectly concealed by them. Nay, much more than that. I saw one shallow hollow some three feet across which was completely filled with them, all in motion but resting one upon another, to the depth, as I found by measurement with a stick, of more than an inch, — a living mass of insect life. There were a hundred of these basins full of them, and I then discovered that what I had mistaken for some black dye on the wet shore was the bodies of those that were drowned and washed up, blackening the shore in patches for many feet together like so much mud. We were also troubled by getting them into our mouths and throats and eyes. This insect resembles the plate of the *Chironomus plumosus* ("Library of Entertaining Knowledge, Insect Transformations," page 305), also the *Corethra plumicornis* (page 287), both of which live at first in the water, like the mosquito.

Young red maples suddenly bursting into leaf are very conspicuous now in the woods, among the most prominent of all shrubs or trees. The sprouts are reddish.

Hear yellow-throat vireo, and probably some new warblers. See the strong-scented wood ants in a stump.

Black suckers, so called, are being speared at the factory bridge.

This is about the last of the very dry leaves in the woods, for soon the ground will be shaded by expanded green leaves. It is quite hazy, if not smoky, and I smell smoke in the air, this hot day. My assistants, being accustomed to work indoors in the factory, are quite overcome by this sudden heat. The old leaves and earth are driest now, just before the new leaves expand and when the heat is greatest. I see the black traces of many a recent fire in the woods, especially in young woods.

At evening I hear the first sultry buzz of a fly in my chamber, telling of sultry nights to come.

May 7. *Saturday.* Surveying Damon's Acton lot.

It is hotter still, — 88° or more, as I hear in the afternoon. I frequently see pigeons dashing about in small flocks, or three or four at a time, over the woods here. Theirs is a peculiarly swift, dashing flight. The mayflower is still sparingly in bloom on what I will call Mayflower Path in this lot. It is almost the prevailing undershrub here. I think I hear the redstart.

To-day and yesterday the sunlight is peculiarly yellow, on account of the smoky haze. I notice its peculiar yellowness, almost orange, even when, coming through a knot-hole in a dark room, it falls on the opposite wall. Such is the first hot weather.

May 8. *Sunday.* Hotter still than the last two days, — 90° and more. Summer yellowbird. C. sees a chimney swallow. Indeed, several new birds have come, and many new insects, with the expanding leafets. Catbird. The swollen leaf-buds of the white pine — and

yet more the pitch pine — look whitish, and show life in the tree.

Go on the river.

The sweet flags, both pads, and equisetum and pontederia are suddenly becoming conspicuous, also the *Arum peltandrum*. Grackles here yet. Tree-toad is heard. Apple trees begin to make a show with their green. See two great devil's-needles go by coupled, the foremost blue, the second brown.

Hear a dor-bug in the house at evening.

May 9. Surveying for Stow near Flint's Pond.

Hear the warbling vireo and oven-bird; yellow-throat vireo (?). One helping me says he scared up a whip-poor-will from the ground.

See black birch bloom fallen effete.

The first thunder this afternoon.

May 11. *Wednesday*. Golden robin yesterday. Fir-balsam well out in the rain; so say 9th.

P. M. — To Flint's Pond.

Arum triphyllum out. Almost every one has a little fly or two concealed within. One of the handsomest-formed plants when in flower. Sorrel out in rain, apparently a day or two, — say 9th. A blue heron flies away from the shore of the pond.

Scirpus planifolius in bloom on Smith's wooded hill, side of Saw Mill Brook.

A partridge-nest, with eleven fresh eggs, at foot of a chestnut, one upon another. It is quite a deep cavity amid the leaves, with some feathers of the bird in it.

Young, or fresh-expanding, oak leaves are very handsome now, showing their colors. It is a leafy mist throughout the forest.

Uvularia perfoliata out in rain; say, then, the 9th. Just after plucking it I perceived what I call the *meadow* fragrance, though in the woods; but I afterward found that this flower was peculiarly fragrant, and its fragrance like that, so it was probably this which I had perceived. S. was reminded of the lily-of-the-valley by it.

The witch-hazel has one of the broadest leaves now.

In the path in Stow's wood-lot, I find apparently *Thaspium aureum* (*Zizia aurea*), which will open the first fair day.[1] Shows quite yellow now.

Found in the path in the woods by the Mill Brook ditch, Flint's Pond, dead, the *Coluber punctatus*, 13¼ inches long, but no row of spots in middle of abdomen. The head above blackish with a blackish ring behind the yellow. Tail 3 inches long; breadth of body $\frac{5}{16}$; plates 162; scales 55. Above, uniform glossy slate-color, with a yellowish-white band across the occiput; the head above blackish, and a blackish band close behind the yellowish one. Beneath, yellow or buff (whitish under head), with a row of small slanting black spots, one on each side of each abdominal plate except the first ¾ inch behind the head. In the midst of the path in the woods. I admired the iridescence from its glossy belly. It differs from Storer's *C. punctatus*, for it is not brown above, nor "reddish yellow" beneath, and has no row of spots in middle of the abdomen.

In that first thunder-shower, the evening of the 9th,

[1] 13th in house and probably abroad.

the grass evidently erected itself and grew darker, as it were instantaneously. Was it the effect of electricity in the air? It looked very differently from what it had ten minutes before.

May 12. Dug up to-day the red-brown dor-bugs. My red oak acorns have sent down long radicles underground. A parti-colored warbler hangs dead downward like a goldfinch on our gooseberries, within a few feet of me, apparently about the blossoms.

May 13. *Friday.* Surveying Damon's Acton lot.

Hear the pe-pe and evergreen-forest note, also night-warbler (the last perhaps the 11th).

Apple in bloom.

May 14. *Saturday.* Surveying for Damon.

Rhodora out, says C. Yorrick heard the 12th. Did I hear a bobolink this morning? C. says he heard a yellow-legs yesterday.

Bought a black sucker (?), just speared at the factory dam, fifteen inches long, blacker than I am used to, I think; at any rate a very good fish to eat, as I proved, while the other common sucker there is said not to be. This had very conspicuous corrugations on the lips. I suspect that their other one is the horned chub. They have speared the former a long time there, and it is getting late for them.

Vernal grass quite common at Willis Spring now.

May 15. *Sunday.* Observe *Cornus florida* involucres.

Sarsaparilla flower. *Salix discolor* seed, or down, begins to blow.

A woodcock starts up with whistling sound.

I have been struck of late with the prominence of the *Viburnum nudum* leaf in the swamps, reddish-brown and one inch over, a peculiarly large and mature-looking, firm-looking leaf.

Swamp white oak leafed several days, but generally appears as in winter at a little distance. *Salix lucida* well out, how long? Nemopanthes flower, apparently a day or two.

Now, when the warblers begin to come in numbers with the leafing of the trees, the woods are so open that you can easily see them. They are scarce and silent in a cool and windy day, or found only in sheltered places.

I see an oak shoot (or sprout) already grown ten inches, when the buds of oaks and of most trees are but just burst generally. You are surprised to see such a sudden and rapid development when you had but just begun to think of renewed life, not yet of growth. Very properly these are called shoots. This plant has, perhaps, in four or five days accomplished one fourth part [of] its whole summer's growth. (So on the 4th of June I notice the shoots of the white pine, five to nine inches long, arranged raywise about the terminal one and the end of their branches, having in about a fortnight accomplished one quarter to one third their whole summer growth. Thus they may be properly said to *shoot* when their season comes, and then stand to harden and mature before the winter.)

May 16. *Monday.* Surveying Damon's farm and factory lot.

Our corydalis was out the 13th. Hear a tanager to-day, and one was seen yesterday. Sand cherry out. *Ranunculus abortivus* well out (when?), southwest angle of Damon's farm. Hear a bobolink and kingbird, and find sparrows' nests on the ground.

At eve the first *spark* of a nighthawk.

May 18. Surveying for Stow in Lincoln.

Two-leaved Solomon's-seal. I hear of young song sparrows and young robins since the 16th. That handsome spawn of Ed. Emerson's aquarium — minute transparent ova in a double row on the glass or the stones — turns out to be snail-spawn, it having just hatched, and there was no salamander-spawn, as I thought on the 18th of April. Not *Paludina decisa*, but the smaller and simpler one.

May 19. Our *Azalea nudiflora* flowers.

It is a warm, muggy, rainy evening, when the nighthawks commonly *spark* and the whip-poor-will is heard.

May 22. *Sunday.* A warm, drizzling day, the tender yellow leafets now generally conspicuous, and contrasting with the almost black evergreens which they have begun to invest. The foliage is never more conspicuously a tender yellow than now. This lasts a week from this date, and then begins to be confounded with the older green. We have had rain for three or four days, and hence the tender foliage is the more yellow.

Swallows fly low. The *Ranunculus bulbosus* is abundant.

I see that by the very severe frost of about the 15th, or full of the moon, a great many leaves were killed, as young oaks, cultivated grapes,[1] butternuts, ferns, etc., etc., which now show brown or blackish.[2]

May 24. What that brilliant warbler on the young trees on the side of the Deep Cut? Orange throat and beneath, with distinct black stripes on breast (*i. e.* on each side?), and, I think, some light color on crown. Was [it] Blackburnian? or *maculosa*??[3]

Hear the wood pewee.

Sand cherry flower is apparently at its height. I see (the 9th of June) that its fruit is an abortive puff, like that of some plums.

May 25. Dragon-flies have begun to come out of their larva state in numbers, leaving the cases on the weeds, etc. See one tender and just out this forenoon.

Meadow fox-tail grass abundantly out (how long?), front of E. Hosmer's by bars and in E. Hubbard's meadow, front of meeting-house.

The *Salix petiolaris* is either entire or serrate, and generally, I should now say, was becoming serrate, the later leaves, *e. g.* that one, a fertile one, nearly opposite the Shattuck oak. The river is quite high for the season, on account of the late rains. Hear within a day or two

[1] And some native.

[2] White ash; ferns generally; apparently *Polygala verticillata*, for it is not leafed again the 24th.

[3] Probably first.

what I call the *sprayey* note of the toad, different and later than its early *ring*.

May 26. *Thursday*. P. M. — To Ledum Swamp and Lee's Cliff.

Eleocharis tenuis in bloom, apparently the earliest eleocharis. The rhodora at Ledum Swamp is now in its perfection, brilliant islands of color. *Eriophorum vaginatum*, how long? Ledum out apparently two or three days. *Andromeda Polifolia* out, how long? Tall swamp huckleberry just budded to bloom. Do I not hear the nuthatch note in the swamp? Do not detect the scheuchzeria there yet.[1]

The air is full of terebinthine odors to-day, — the scent of the sweet-fern, etc. The reddish leaves (and calyx) of the *Vaccinium vacillans*, just leafed, are interesting and peculiar now, perhaps more or less crimson. See a flock of cowbirds, the first I have seen. Cows in water, so warm has it got to be. Geranium (how long?), behind Bittern Cliff, and wild pink. Pitch pine pollen at Lee's. Cherry-birds. Ascendant potentilla abundant, how long? *Juniperus repens* pollen, how long? Interrupted fern pollen [*sic*]. The dicksonia fern is one foot high, but not fairly unfolded. The tender white-downy stems of the meadow saxifrage, seen toward the westering sun, are very conspicuous and thick in the meadows now.

A purple finch's nest in one of our firs.

May 27. *Friday*. P. M. — Up Assabet.

[1] *Vide* 30th.

Now first I notice a linty dust on the surface of the dark river at the Hemlocks, evidently from the new and downy leaves. These expressions of the face of Nature are as constant and sure to recur as those of the eyes of maidens, from year to year, — sure to be repeated as long as time lasts. It is a new and peculiar season when this phenomenon is observed. Rivers flow already bearing the dust of summer on their bosoms. The dark river, now that shades are increased, is like the dark eye of a maiden.

Azalea nudiflora blooms generally.

Hear a black and white creeper sing, *ah vee vee, vee vee, vitchet vitchet vitchet vitchet.*

A peculiarity of these days is the first hearing of the crickets' creak, suggesting philosophy and thought. No greater event transpires now. It is the most interesting piece of news to be communicated, yet it is not in any newspaper.[1]

Melvin and Skinner tell me of three wild geese, to their surprise seen within a week down the river, — a gander and two geese, — which must be breeding here. Melvin got near them a fortnight ago. They are too much disturbed to rear a brood, I think.

Melvin tells of seeing once in June dead shad-flies washed up on the North Branch in windrows, along the shore.

Golden senecio, at least to-morrow.

Went by Temple's. For rural interest, give me the houses of the poor, with simply a cool spring, a good deal of weather-stained wood, and a natural door-stone:

[1] [Channing, p. 296.]

a house standing somewhere in nature, and not merely in an atmosphere of art, on a measured lot; on a hillside, perchance, obviously not made by any gardener, amid rocks not placed there by a landscape gardener for effect; with nothing "pretty" about it, but life reduced to its lowest terms and yet found to be beautiful. This is a good foundation or board to spring from. All that the natives erect themselves above that will be a genuine growth.

Blue-eyed grass out.

May 28. *Saturday.* P. M. — To Cliffs.

Some *Salix rostrata* seed begins to fly. Low blackberry in bloom on railroad bank. Also *S. Torreyana* seed, just begun to fly. *S. pedicellaris* long out of bloom there.

At the extreme east side of Trillium Wood, come upon a black snake, which at first keeps still prudently, thinking I may not see him, — in the grass in open land, — then glides to the edge of the wood and darts swiftly up into the top of some slender shrubs there — *Viburnum dentatum* and alder — and lies stretched out, eying me, in horizontal loops eight feet high. The biggest shrub was not over one inch thick at the ground. At first I thought its neck was its chief member, — as if it drew itself up by it, — but again I thought that it rather (when I watched it ascending) extended its neck and a great part of its body upward, while the lower extremity was more or less coiled and rigid on the twigs from a *point d'appui.* Thus it lifted itself quickly to higher forks. When it moved along more horizontally,

it extended its neck far, and placed it successively between the slender forks. This snake, some four feet long, rested there at length twelve feet high, on twigs, not one so big as a pipe-stem, in the top of a shad-bush; yet this one's tail was broken off where a third of an inch thick, and it could not cling with that. It was quick as thought in its motions there, and perfectly at home in the trees, so far was it from making the impression of a snake in an awkward position.

Cinnamon fern pollen [*sic*]. Lady's-slipper pollen. These grow under pines even in swamps, as at Ledum Swamp.

The lint from leaves sticks to your clothes now. Hear a rose-breasted grosbeak.

Methinks every tree and shrub is started, or more, now, but the *Vaccinium dumosum*, which has not burst.

May 29. *Sunday.* Thorn bushes and the *Ranunculus bulbosus* are apparently in prime.

Coming out of Sleepy Hollow Cemetery to-day, where I had just been to deposit the corpse of a man, I picked up an oak three inches high with the acorn attached. They are just springing up now on all sides.

The republican swallow at Hosmer's barn just begun to lay.

May 30. P. M. — To Gowing's Swamp.

Sorrel begins to redden fields. The peculiarly tender foliage (yellowish) which began to invest the dark evergreens on the 22d lasts a week or more, growing darker. No American mountain-ash out.

When I entered the interior meadow of Gowing's Swamp I heard a slight snort, and found that I had suddenly come upon a woodchuck amid the sphagnum, lambkill, *Kalmia glauca*, andromeda, cranberry, etc., there. It was only seven feet off, and, being surprised, would not run. It would only stand erect from time to time, — perfectly erect with its blackish paws held like hands near together in front, — just so as to bring its head, or eyes, above the level of the lambkill, kalmia, etc., and look round, turning now this ear toward me, then that; and every now and then it would make a short rush at me, half a foot or so, with a snort, and then draw back, and also grit its teeth — which it showed — very audibly, with a rattling sound, evidently to intimidate me. I could not drive it, but it would steadily face me and rush toward me thus. Also it made a short motion occasionally as if to bury itself by burrowing there. It impressed me as a singularly wild and grizzly [*sic*] native, survivor of the red man. He may have thought that no one but he came to Gowing's Swamp these afternoons.

Its colors were gray, reddish brown, and blackish, the gray-tipped wind hairs giving it a grizzly look above, and when it stood up its distinct rust-color beneath was seen, while the top of its head was dark-brown, becoming black at snout, as also its paws and its little rounded ears. Its head from snout to ears, when it stood up erect, made a nearly horizontal line. It did much looking round. When thus erect, its expression and posture were very bear-like, with the clumsiness of the bear. Though I drew off three or four rods, it

would not retreat into the thicket (which was only a rod off) while I was there so near.

The scheuchzeria is at height or past. E. Emerson's *Calla palustris* out the 27th. *Eleocharis palustris*, R. W. E.'s meadow, not long. Hear of linnæa out, the 28th.

May 31. *Tuesday.* Small black flies or millers over river, with long feelers, flying low in swarms now.

IV

JUNE, 1859

(ÆT. 41)

June 1. *Wednesday.* Some boys found yesterday, in tussock of sedge amid some flags in a wet place in Cyrus Hosmer's meadow, west of the willow-row, six inches above the water, the nest evidently of a rail, with seven eggs. I got one to-day. It is cream-colored, sprinkled with reddish-brown spots and more internal purplish ones, on most eggs (not on mine) chiefly about the larger end. *Vide* September 7th and 9th and 21st and December 7th, '58, and June 13th, '59. The nest (which I have) is made of old sedge, five or six inches [in] diameter and one or two deep.

There has been an abundance of meadow sedges (*carices*) flowering and fruiting in May, but from the end of May to the middle of June is apparently the best time to study them.

Eleocharis palustris not quite open yesterday in river.[1]

June 2. I hear that Farmer shot on the 28th *ult.* two marsh hawks, male and female, and got their four eggs, in which the young were moving.

P. M. — To Flint's Pond.

Red maple seed is partly blown off. Some of it is conspicuously whitish or light-colored on the trees.

[1] Open on the 3d.

Examine a small striped snake, some sixteen inches long. Dark-brown above, with a grayish dorsal line and squarish black spots in the brown; then lighter-brown or dead-leaf color on the sides, chocolate-brown still lower, and light or pale-cream brown beneath. A dark-brown spot on each side of each abdominal plate. The sides yellowish forward. This is apparently a striped snake, but not yellow-striped as described.

Strawberries reddening on some hills.

Found within three rods of Flint's Pond a rose-breasted grosbeak's nest.[1] It was in a thicket where there was much cat-briar, in a high blueberry bush, some five feet from the ground, in the forks of the bush, and of very loose construction, being made of the dead gray extremities of the cat-briar, with its tendrils (and some of this had dropped on the ground beneath), and this was lined merely with fine brown stems of weeds like pinweeds, without any leaves or anything else, — a slight nest on the whole. Saw the birds. The male uttered a very peculiar sharp clicking or squeaking note of alarm while I was near the nest. The egg is thickly spotted with reddish brown on a pale-blue ground (not white ground as Buonaparte and the New York ornithologist say), like a hermit thrush's, but rounder; very delicate.

June 3. *Friday.* P. M. — Up Assabet.

A large yellow butterfly (somewhat Harris *Papilio Asterias* like but not *black*-winged) three and a half to four inches in expanse. Pale-yellow, the front wings

[1] And one fresh egg (three on the 4th).

crossed by three or four black bars; rear, or outer edge, of all wings widely bordered with black, and some yellow behind it; a short black tail to each hind one, with two blue spots in front of two red-brown ones on the tail.[1]

Arenaria lateriflora well out, how long? Common rum cherry out yesterday, how long? *Carex crinita* out a good while. *Carex lanuginosa*, Smith's shore, green fruit. *Carex pallescens*, Smith's shore (higher up bank), green fruit.

Nighthawk, two eggs, fresh. Quail heard.

June 4. P. M. — To Flint's Pond.

Cornus alternifolia well out, apparently three or four days. Yellow-eyed grass, how long? *Poa compressa* not quite out.

June 5. *Sunday.* P. M. — To Ball's Hill.

Cat-briar in flower, how long? Allium not out.

See several ducks, I think both summer and black.

A yellowbird's nest; four eggs, developed. Pigeon woodpecker's nest in a hollow black willow over river; six eggs, almost hatched.

The new white maple leaves look reddish, and at a distance brown, as if they had not put out yet.

June 6. P. M. — To Well Meadow.

Yellow wood-sorrel out. Umbelled thesium, how long? Red avens, how long? *Stellaria longifolia*, at Well Meadow Head, how long? *Cardamine rhomboidea* has green seed.

[1] *P. Turnus?*

Hear of a kingfisher's nest, just found in a sand-bank behind Abner Buttrick's, with six fresh eggs, of which I have one. The boy said it was six or seven feet deep in the bank.

June 8. *Wednesday.* Notice that one of these little silvery scales on a stone is now empty of eggs; how long? See a painted turtle beginning to lay. She has merely scratched the ground a little, and moistened it very much. This must be to make it adherent. It is at the same time beginning to rain. See lightning-bugs to-night.

Noticed yesterday, dancing before our chamber windows, swarms of little plumed gnats with white wings and a reddish body forward. One on my book at night incessantly leaps backward. It seems to be a kind of *Chironomus.*

June 9. *Thursday.* A boy shows me one of three (apparent) hen-hawk's eggs, fresh, obtained on the 6th from a pine near Breed's house site.

June 10. *Friday.* Surveying for D. B. Clark on "College Road," so called in Peter Temple's deed in 1811, Clark thought from a house so called once standing on it. Cut a line, and after measured it, in a thick wood, which passed within two feet of a blue jay's nest which was about four feet up a birch, beneath the leafy branches and quite exposed. The bird sat perfectly still with its head up and bill open upon its pretty large young, not moving in the least, while we drove a stake

close by, within three feet, and cut and measured, being about there twenty minutes at least.

June 11. P. M. — To Owl Swamp.

Lambkill flower. Carrion-flower up a day or two. *Panicum latifolium* (not out) grows by riverside at Dakin's Brook. Ferns generally were killed by the frost of last month, *e. g.* brakes, cinnamon fern, flowering and sensitive ferns, and no doubt others. I smell the strong sour scent of their decaying. *Galium triflorum*, how long?

In one grove pitch pine shoots are from seven to nine tenths as long as last year's growth.

When I return, about 5 P. M., the shad-flies swarm over the river in considerable numbers, but there are very few at sundown. Hemlocks are about at height of their beauty, with their fresh growth.

June 12. *Sunday.* P. M. — To Gowing's Swamp.

I am struck with the beauty of the sorrel now, *e. g.* *Lepidium campestre* field. What a wholesome red! It is densest in parallel lines according to the plowing or cultivation. There is hardly a more agreeable sight at this season.

Maryland yellow-throat four eggs, fresh, in sphagnum in the interior *omphalos*.

June 13. To Boston.

My rail's egg of June 1st looks like that of the Virginia rail in the Boston collection. A boy brought me a remarkably large cuckoo's egg on the 11th. Was it not

that of the yellow-billed? The one in the collection looks like it. This one at B. is not only larger but lighter-colored.

In the plates of Hooker's "Flora Boreali-Americana," the leaves of *Vaccinium cæspitosum* are not so wide as the fruit; yet mine of Tuckerman's Ravine may be it.

June 14. P. M. — To Flint's Pond.

Early strawberries begin to be common. The lower leaves of the plant are red, concealing the fruit. Violets, especially of dry land, are scarce now.

Eleocharis palustris abundant in Stow's meadow, by railroad. See a rose-bug.

A pout's nest (at Pout's Nest) with a straight entrance some twenty inches long and a simple round nest at end. The young just hatched, all head, light-colored, under a mass of weedy hummock which is all under water.

The common utricularia out. Hear the *phebe* note of a chickadee. Cow-wheat, how long? A rose-breasted grosbeak betrays itself by that peculiar squeak, on the Britton path. It is evident that many breed in the low woods by Flint's Pond. Catbird's nest with four eggs in a swamp-pink, three and a half feet up.

The rose-breasted grosbeak is common now in the Flint's Pond woods. It is not at all shy, and our richest

singer, perhaps, after the wood thrush. The rhythm is very like that of the tanager, but the strain is perfectly clear and sweet. One sits on the bare dead twig of a chestnut, high over the road, at Gourgas Wood, and over my head, and sings clear and loud at regular intervals, — the strain about ten or fifteen seconds long, rising and swelling to the end, with various modulations. Another, singing in emulation, regularly answers it, alternating with it, from a distance, at least a quarter of a mile off. It sings thus long at a time, and I leave it singing there, regardless of me.

June 15. A. M. — To lead-mill, Acton.

Suddenly hot weather, — 90° — after very cool days. Yarrow out, how long? Blue flag abundant. Blue-eyed grass at height.

Saw near mill, on the wooded hillside, a regular old-fashioned country house, long and low, one story unpainted, with a broad green field, half orchard, for all yard between it and the road, — a part of the hillside, — and much June-grass before it. This is where the men who save the country are born and bred. Here is the pure fountain of human life.

Walked over a rocky hill there in the midst of the heat. How interesting a thin patch of strawberry vines now on a rocky hillside, though the fruit is quite scarce! Good for suggestion and intention, at least.

Herd's-grass spikes just appear; not in bloom. (My notes on this hitherto not to be trusted.)

Sitting by Hubbard Bath [?] swamp wood and looking

north, at 3 P. M., I notice the now peculiar glaucous color of the very water, as well as the meadow-grass (*i. e.* sedge), at a dozen or twenty rods' distance, seen through the slight haze which accompanies this first June heat. A sort of leaden color, as if the fumes of lead floated over it.

Young crow blackbirds which have left the nest, with great heads and bills, the top of the head covered with a conspicuous raised light-colored down.

A fly (good-sized) with a large black patch on the wing and a reddish head alights on my hand. (A day or two after, one with a greenish head.)

Birds *shoot* like twigs. The young are as big as the old when they leave the nest; have only got to harden and mature.

June 16. P. M. — Paddle to Great Meadows.

Small snapdragon, how long?

Examined a kingfisher's nest, — though there is a *slight* doubt if I found the spot. It was formed singularly like that of the bank swallow, *i. e.* flat-elliptical, thus: some eight inches, as I remember, in the largest diameter, and located just like a swallow's, in a sand-bank, some twenty inches below the surface. Could feel nothing in it, but it may have been removed. Have an egg from this.

Walked into the Great Meadows from the angle on the west side of the Holt, in order to see what were the prevailing sedges, etc.

On the dry and hard bank by the river, grows June-grass, etc., *Carex scoparia, stellulata, stricta,* and *Bux-*

baumii; in the wet parts, pipes two and a half feet high, *C. lanuginosa, C. bullata* (?), [*C.*] *monile, Eleocharis palustris, Panicum virgatum* [1] (a little just begins to show itself), and *Glyceria fluitans* here and there and out. There was a noble sea of pipes, — you may say pipes exclusively, — a rich dark green, quite distinct from the rest of the meadow and visible afar, a broad stream of this valuable grass growing densely, two and a half feet high in water. Next to this, south, where it was quite as wet, or wetter, grew the tall and slender *C. lanuginosa,* the prevailing sedge in the wetter parts where I walked. This was a sheeny glaucous green, bounding the pipes on each side, of a dry look. Next in abundance in the wet parts were the inflated sedges above named.[2] Those pipes, in such a mass, are, methinks, the richest mass of uniform dark liquid green now to be seen on the surface of the town [?]. You might call this meadow the "Green Sea."

Phalaris Americana, Canary grass, just out. The island by Hunt's Bridge is densely covered with it.

Saw, in the midst of the Great Meadows, the trails or canals of the musquash running an indefinite distance, now open canals full of water, in which ever minnows dart constantly, deep under the grass; and here and there you come to the stool of a musquash, where it has flatted down the tufts of sedge and perhaps gnawed them off.

June 17. Rain, especially heavy rain, raising the river in the night of the 17th.

[1] Blue-joint. [2] *Vide* July 7th, '59, also June 22d, '60.

June 18. P. M. — Sail up river.

Rain again, and we take shelter under a bridge, and again under our boat, and again under a pine tree. It is worth the while to sit or lie through a shower thus under a bridge or under a boat on the bank, because the rain is a much more interesting and remarkable phenomenon under these circumstances. The surface of the stream betrays every drop from the first to the last, and all the variations of the storm, so much more expressive is the water than the comparatively brutish face of earth. We no doubt often walk between drops of rain falling thinly, without knowing it, though if on the water we should have been advertised of it. At last the whole surface is nicked with the rebounding drops as if the surface rose in little cones to accompany or meet the drops, till it looks like the back of some spiny fruit or animal, and yet the different-colored currents, light and dark, are seen through it all; and then, when it clears up, how gradually the surface of the water becomes more placid and bright, the dimples growing fewer and finer till the prolonged reflections of trees are seen in it, and the water is lit up with a joy which is in sympathy with our own, while the earth is comparatively dead. I saw swarms of little gnats, light-winged, dancing over the water in the midst of the rain, though you would say any drop would end one's days.

The swamp white oaks and red maples and willows, etc., now first begin to show a slight silveriness on the under edges of their flakes, where the under sides of the new leaves are shown.

June 19. *Sunday.* P. M. — To Heywood Meadow and Well Meadow.

In Stow's meadow by railroad, *Scirpus Eriophorum*, with blackish bracts, not long out.

A flying squirrel's nest and young on Emerson's hatchet path, south of Walden, on hilltop, in a covered hollow in a small old stump at base of a young oak, covered with fallen leaves and a portion of the stump; nest apparently of dry grass. Saw three young run out after the mother and up a slender oak. The young half-grown, very tender-looking and weak-tailed, yet one climbed quite to the top of an oak twenty-five feet high, though feebly. Claws must be very sharp and early developed. The mother rested quite near, on a small projecting stub big as a pipe-stem, curled crosswise on it. Have a more rounded head and snout than our other squirrels. The young in danger of being picked off by hawks.

Find by Baker Rock the (apparently) *Carex Muhlenbergii* gone to seed, dark-green, as Torrey says. Resembles the *stipata*.

Blackbirds nest in the small pond there, and generally in similar weedy and bushy pond-holes in woods.

The prevailing sedge of Heywood Meadow by Bartlett Hill-side, that which showed yellow tops in the spring, is the *Carex stricta*. On this the musquash there commonly makes its stools. A tall slender sedge with conspicuous brown staminate spikes. Also some *C. lanuginosa* with it. *C. canescens*, too, grows there, less conspicuous, like the others gone to seed.

Scare up young partridges; size of chickens just

hatched, yet they fly. The old one in the woods near makes a chuckling sound just like a red squirrel's bark, also mewing.

Flies rain about my head.

Notice green berries,— blueberries and huckleberries.

Is that red-top, nearly out on railroad bank? *Eriophorum polystachyon* of Torrey, Bigelow, and Gray, the apparently broadish-leaved, but Gray makes the wool too long. In Pleasant and Well Meadow; at height.

Carex polytrichoides in fruit and a little in flower, Heywood Meadow in woods and Spanish Meadow Swamp. *Trisetum palustre* (?), Well Meadow Head, in wet; apparently at height.

June 20. River, on account of rain, some two feet above summer level.

Great purple fringed orchis.

What that colored-flowered locust in Deacon Farrar's yard and house this side Lincoln?

June 21. *Tuesday.* P. M. — To Derby's pasture behind and beyond schoolhouse.

Meadow-sweet. Hedge-hyssop out. In that little pool near the Assabet, above our bath-place there, *Glyceria pallida* well out in water and *Carex lagopodioides* just beginning. That grass covering dry and dryish fields and hills, with curled or convolute radical leaves, is apparently *Festuca ovina*, and not *Danthonia* as I thought it. It is now generally conspicuous. Are any of our simpler forms the *F. tenella?* [1]

[1] *Vide* July 2d, 1860.

You see now the *Eupatoreum purpureum* pushing up in rank masses in the low grounds, and the lower part of the uppermost leaves, forming a sort of cup, is conspicuously purplish.

June 22. Paddle up the river to Lee's, measuring the bridges.

The sun coming out at intervals to-day, after a long rainy and cloudy spell in which the weeds have grown much, I observe that the rough goldenrods and one other, which have grown one to two feet high, have many of them in various parts of the town immediately drooped their tops, hanging down five or six inches. This weed appears to be particularly tender in this respect, having probably grown very rapidly in the rain.

Comara palustris, how long? *Scirpus lacustris* is freshly out.

I notice a black willow top a foot above water, a dozen rods from shore, near the outlet of Fair Haven Pond, or just off the point of the Island, where the water is ten feet deep by my measure, and it is alive and green. Yet one who was not almost daily on the river would not perceive this revolution constantly going on. Only in very few cases [1] can I discover where the surface has been taken up, since the water stands over and conceals the scar till it is healed, and for similar reasons it is hard to tell what is a fresh deposit and what an old growth. I should say that the largest masses, or islands, of button-bushes standing in the

[1] And at lowest water a month later.

meadows had drifted there. Even the owner of the meadow and the haymakers may not always detect what was imported thus the previous spring, these transplanted plants look so at home there. So the revolution is almost an imperceptible one. Many seeing the green willow-tops rising above the surface in deep water think that there is a rock there on which they grow. There is a very large mass of bushes thus moved on the right shore, some way above Sherman's Bridge, and a large mass above Heard's Bridge some distance, on the east side (having drifted across).

I hear now that snapping sound under the pads, or probably as soon as the pads are thickly spread over the surface. Also I hear it made by a fish darting to the surface in midstream where are no weeds, — a dry, snapping sound.

June 23. Ride to Wayland, surveying the bridges.

Veiny-leaved hawkweed freshly out.

At Heard's Bridge the white maple is the prevailing one, and I do not notice a red one there nor at Bridle Point Bridge. I think I saw the white as far down as the Sudbury causeway.[1]

A foggy, Cape-Cod day, with an easterly wind.

June 24. To Billerica dam, surveying the bridges.

Another foggy [*sic*], amounting from time to time to a fine rain, and more, even to a shower, though the grass was thickly covered with cobwebs in the morning. Yet

[1] The next day saw the white maple and hibiscus in Billerica on the river, — the maple at least as far down as the falls.

it was a condensed fog, I should say. Its value appeared to be as a veil to protect the tender vegetation after the long rainy and cloudy weather.

The 22d, 23d, and 24th, I have been surveying the bridges and river from Heard's Bridge to the Billerica dam. I hear of two places in Wayland where there was formerly what was called a hay bridge, but no causeway, at some narrow and shallow place, a hundred years ago or more. Have looked after all the swift and the shallow places also.

The testimony of the farmers, etc., is that the river thirty to fifty years ago was much lower in the summer than now. Deacon Richard Heard spoke of playing when a boy on the river side of the bushes where the pads are, and of wading with great ease at Heard's Bridge, and I hear that one Rice (of Wayland or Sudbury), an old man, remembers galloping his horse through the meadows to the edge of the river. The meadow just above the causeway on the Wayland side was spoken of as particularly valuable. Colonel David Heard, who accompanied me and is best acquainted of any with the details of the controversy, — has worked at clearing out the river (I think about 1820), — said that he did not know of a rock in the river from the falls near the Framingham line to perhaps the rear of Hubbard's in Concord.

The grass not having been cut last year, the ice in the spring broke off great quantities of pipes, etc., immense masses of them, which were floated and drifted down against the causeways and bridges; and there they lie still, almost concealing any green grass,

like a raft on the meadows, along the south side the causeways. The inhabitants of Wayland used a good deal for mulching trees. One told me that at Sherman's Bridge they stretched quite across the river above the bridge, so that a man "could walk across on them," — perhaps "did walk across on them," — but on inquiring of one who lived by the bridge I learned that "a dog could not have walked across on them."

Daniel Garfield, whom I met fishing on the river, and who has worked on Nine-Acre Corner and Lee's Bridges for fifty years or more, could remember one year when Captain Wheeler dug much mud from the river, when the water was so low that he could throw out pickerel on each side outside the bushes (where the pads now are). Says that his old master with whom he lived in Lincoln when he was young told him that he wheeled the first barrow-load at the building of Lee's Bridge and road, and that if he were alive now he would be a good deal over a hundred years old. Yet Shattuck says that bridge was a new bridge in 1660.

Ebenezer Conant remembers when the Canal dam was built, and that before that it used to be dry at midsummer outside the bushes on each side.

Lee says that about 1819 the bridge near him was rebuilt and the mud-sills taken up. These are said to remain sound an indefinite while. When they put in a new pile (Buttrick the carpenter tells me) they find the mortise in the mud-sill and place it in that. Deacon Farrar says that he can remember Lee's Bridge seventy-five years ago, and that it was not a new bridge then. That it is sometimes obstructed by hay in the spring.

That he has seen a chip go faster up-stream there than ever down. His son said this was the case considerably further up in the meadows toward Rice's, and he thought it the effect of Stow River backing up.

Deacon Farrar thought the hay bridge called Farrar's Bridge was for foot-passengers only.

I found the water in Fair Haven Pond on the 22d twelve to thirteen feet deep in what I thought the channel, but in Purple Utricularia Bay, half a dozen rods from the steep hill, twenty-two and a half feet was the most I found.

John Hosmer tells me that he remembers Major Hosmer's testifying that the South Bridge was carried up-stream, before the court, at the beginning of the controversy.

Simonds of Bedford, who is measuring the rapidity of the current at Carlisle Bridge, says that a board with a string attached ran off there one hundred yards in fifteen minutes at the height of water (in May, and pretty high), when the Commissioners were here. That he has found it to be swiftest just after the water has begun to fall.

The character of the river valley changes about at Hill's Bridge. The meadows are quite narrow and of a different character, — higher and firmer, — a long hill bounds the meadow, and almost the river, on the west for a good way, and high land on the east, and the bottom is harder and said to be often rocky (?).

The water was about four and a half feet deep — sounded with a paddle and guessed at — at the Fordway, and at that stage so swift and strong that you

could not row a boat against it in the swiftest part of the falls.[1]

June 26. *Sunday.* P. M. — Up Assabet.

The black willow down is now quite conspicuous on the trees, giving them a parti-colored or spotted white and green look, quite interesting, like a fruit. It also rests on the water by the sides of the stream, where caught by alders, etc., in narrow crescents ten and five feet long, at right angles with the bank, so thick and white as to remind me of a dense mass of hoar-frost crystals.

June 27. I find that the tops of my stakes in Moore's Swamp are nearly two feet lower than a fortnight ago, or when Garfield began to fill it.

P. M. — To Walden.

At the further Brister's Spring, under the pine, I find an *Attacus luna*, half hidden under a skunk-cabbage leaf, with its back to the ground and motionless, on the edge of the swamp. The under side is a particularly pale hoary green. It is somewhat greener above with a slightly purplish brown border on the front edge of its front wings, and a brown, yellow, and whitish eye-spot in the middle of each wing. It is very sluggish and allows me to turn it over and cover it up with another leaf, — sleeping till the night come. It has more rela-

[1] July 22d, the average depth of water at the Fordway was two feet, it having fallen in Concord two feet nine and three fourths inches since June 23d; so that the water fell possibly as much in this month at the Fordway as at Concord, — I think surely within half a foot as much.

tion to the moon by its pale hoary-green color and its sluggishness by day than by the form of its tail. A frail creature, rarely met with, though not uncommon.

June 29. P. M. — To Walden.

Very hot. The piper grass bloom in prime. Examined the flying squirrel's nest at the base of a small white [oak] or two (sprouts), four inches through, in a small old white oak stump, half open above, just below the level of the ground, composed of quite a mass of old withered oak leaves and a few fresh green ones, and the inside wholly of fine, dry sedge and sedge-like bark-fibres. The upper side of the nest was half visible from above. It was eight or nine inches across. In it I found the wing of an *Attacus luna*, — and July 1st another wing near Second Division, which makes three between June 27th and July 1st.

At the railroad spring in Howard's meadow, I see two chestnut-sided warblers hopping and chipping as if they had a nest, within six feet of me, a long time. No doubt they are breeding near. Yellow crown with a fine dark longitudinal line, reddish-chestnut sides, black triangle on side of head, white beneath.

River falls several inches.

June 30. Cooler, with a northerly wind. The pads blown up by it already show crimson, it is so strong, but this not a fall phenomenon yet.

V

JULY, 1859

(ÆT. 41–42)

July 1. P. M. — To Second Division Brook.

Have heard the peculiar peep of young tailless golden robins for a day or more.

White water ranunculus in full bloom at least a week, in Second Division Brook, near the dam, in the shade of the bank, a clear day. Its leaves and stems waving in the brook are interesting, — much cut and green.

The *Holcus lanatus*, past prime, near J. P. Brown's little meadow beyond end of his moraine; also grows near southwest end of Hubbard's Grove. *Agrostis*, either *vulgaris* or *alba* (or both), now generally coming into bloom in fields both moist and dry, but I should say with considerable ligules and rather roughish sheaths.

July 2. P. M. — To Stow's chestnut and *Thaspium aureum*.

Vetch, morning-glory, *Andromeda ligustrina*, how long?

Waded out thirteen rods from rock in Flint's Pond, and was only up to my middle.

Mitchella repens is abundantly out. *Pyrola elliptica* out. Cladium not quite.

July 3. P. M. — To Hubbard's Grove.

You see in rich moist mowing the yet slender, recurving unexpanded panicles or heads of the red-top (?), mixed with the upright, rigid herd's-grass. Much of it is out in dry places. *Glyceria fluitans* is very abundant in Depot Field Brook. *Hypericum ellipticum* out.

I noticed the other day, I think the 30th, a large patch of *Agrostis scabra* in E. Hosmer's meadow, — the firmer ridges, — a very interesting purple with its fine waving top, mixed with blue-eyed grass.

The *Mitchella repens*, so abundant now in the northwest part of Hubbard's Grove, emits a strong astringent cherry-like scent as I walk over it, now that it is so abundantly in bloom, which is agreeable to me, — spotting the ground with its downy-looking white flowers.

Eleocharis obtusa and *acicularis* are now apparently in prime at water's edge by Hubbard's Grove bridge path. Also *Juncus bufonius* is very abundant in path there, fresh quite, though some shows seed. *Juncus tenuis*, though quite fresh, is also as much gone to seed.

July 4. June 28th, I observed up the Assabet some exceedingly handsome amelanchier leaves, bright-crimson, regularly striped with green on the veins and with scattered yellow spots. The shrub probably dying. *Vide* some in press.

P. M. — To Fair Haven Pond, measuring depth of river.

As you walk beside a ditch or brook, you see the frogs which you alarm launching themselves from a considerable distance into the brook. They spring considerably upward, so as to clear all intervening obstacles,

and seem to know pretty well where the brook is. Yet no doubt they often strike, to their chagrin and perhaps sorrow, on a pebbly shore or rock. Their noses must be peculiarly organized to resist accidents of this kind, and allow them to cast themselves thus heedlessly into the air, trusting to fall into the water, for they come down nose foremost. A frog reckons that he knows where the brook is. I shudder for them when I see their soft, unshielded proboscis falling thus heedlessly on whatever may be beneath.

I observe at Well Meadow Head that the fall has already come conspicuously to the hellebore, and they are mostly turned yellow, while their large green seed-vessels are ripening; but the skunk-cabbage is still green.

The front-rank polygonum, having been submerged by the unusually high water of the last fortnight, is a conspicuous red or purple color; and this is evidently the effect of the water alone, as, I think, it is the water which turns the early maples.[1] All the river's edge is now tinged with this purplish streak, yet they are healthy-looking leaves.

Johnswort is just fairly begun. *Hypericum ellipticum* and Jersey tea first observed.

The deepest place I find in the river to-day is off Bittern Cliff, answering to the bold shore. There is an uninterrupted deep and wide reach of the river from Fair Haven Pond to Nut Meadow Brook.

July 5. P. M. — To Ball's Hill, sounding river.

[1] Both white and red, when the leaves are not half developed, long ago.

Having sounded the river yesterday and to-day from entrance to Fair Haven Pond to oak at Ball's Hill, the water being to-day three inches lower than yesterday, — or now a foot and a quarter above what I call summer level, — I make these observations: [1] —

Calling any place above Ball's Hill where the water is eleven feet deep or more at summer level a deep hole, I find six such deep holes within the above limits, *viz.*: 1st, under the steep hill at southwest part of Fair Haven Pond; 2d, at Bittern Cliff; 3d, four rods below French's Rock, or opposite mouth of Bill Brook; 4th, deep hole at ash; 5th, deep hole at sharp bend; 6th, deep hole at northeast angle of the Holt. In the order of depth they stand thus: —

1. Purple Utricularia Bay	19¼ feet
2. Sharp bend by Holt	17
3. Northeast angle of Holt	16¼
4. French's Rock	12¼
5. Bittern Cliff	11
6. Deep hole by ash	11

These "holes" appear to be of two kinds. In two, if not three, of the above instances they appear to be a trace of the original formation of the river valley, and to be independent of the river and not necessarily at an

[1] [From now till the middle of August Thoreau devoted much of his time to a study of the physiography of Concord River, and the Journal contains many tables of statistics concerning its depth, its rise and fall, its meanders, the rapidity of its current, and the like. Such details could be of no interest to the general reader, and the editors are assured on expert authority that they are now without scientific value. Most of them are therefore omitted, enough being retained to show something of the method of the work and the painstaking spirit in which it was carried on.]

angle. No. 1 is evidently traceable to a very steep and high hill half a dozen rods off, and No. 5 to a small rocky cliff some three rods off. There is a part of the bare, precipitous cliff under water at lowest level. No. 4 appears to be of a similar character with the last.

The others (or 2, 3, and 6) are of a different character, — where there is meadow on each side and they are not betrayed by any elevation of the shore. In each case they are close to the positive side at an angle in the river. The deepest (and also the deepest of any in the river proper), which will serve for a sample, is at the sharpest bend in the river in Concord, and, I think, at the narrowest part of the river in the town. The stream, not deep and rather more than ordinarily swift above, here strikes square (or worse [?]) against the easterly bank (which is only some three feet above summer level), and has eaten out a channel to that depth, so near the bank (some twelve feet) that you could jump from the bank into the deepest place in the river proper in the town. Thence it shoals regularly to the opposite shore. The bottom exactly in the deepest holes of this last description is not muddy but sandy. In each of these three instances there is a muddy, stagnant expansion on the opposite side just below (or else about opposite), betraying a reaction to this force. There is also a low meadow or point on the opposite side where the river has flowed at a comparatively recent period. The river is not particularly swift at these places.

Calling all places which are four or less feet deep at summer level shallows, there are at least seven such between Fair Haven Pond and Ball's Hill.

Potamogetons begin to prevail below four and a half [feet] (five and a half in sluggish water), and reach quite across the river at three feet. They invariably occupy these shoals, except the one below ash tree with a bottom of shifting sand, though they are densest on broad sandbars occupying the midstream, on which there is one to two and a half or three feet [of] water and a clearer channel on one or both sides or in the middle.

With one exception (*i. e.* Barrett's Bar) these shoals are just below (?) considerable bends. Also the river is generally narrower than the average at the shoals.

The river (in Concord) is much more variable in depth below the junction of the two rivers than above it.

The great bends in Concord above Ball's Hill are about nine. The only remarkable, or Great, Bend in Concord is the Holt, where a new channel might be cut, saving nearly two thirds the distance.

All these bends in C. (except perhaps the Holt in part (?) are occasioned by the river striking firmer land or a hill or cliff and being turned by it. It is like the wriggling of a snake controlled between two fences. It is not so with the Sudbury Meadow bends.

From a rude estimate I should say about one mile, or say one eighth (?) part the river in Concord, is weedy.

There is a peculiarly long, sluggish, wide, deep, and lake-like reach, muddy in the broadest parts (for Concord), from Fair Haven Pond to Nut Meadow Brook. Though in meadows, it is pretty straight. Not enough current to make a meander.

Many a farmer living near the river will tell you of some deep hole which he thinks the deepest in all the

river, and which he says has never been sounded (which may have been true, and hence its reputation), where he has chanced to fish, or possibly bathed, or somebody has been drowned. It only need to be considerably over his head to acquire this reputation. If you tell him you have sounded it, and it was not very deep, he will think that you did not find the right spot.

The deep places in the river are not so obvious as the shallow ones and can only be found by carefully probing it. So perhaps it is with human nature.

Fair Haven Pond, though not very deep generally, is a kind of deep hole, to be referred to Fair Haven and Lee's Cliff, etc.

The deepest part of the river is generally rather toward one side, especially where the stream is energetic. On a curve it is generally deepest on the inside bank, and the bank most upright.

Those deep holes in the Great Meadows are somewhat like trout-holes under the bank in Second Division Brook.

The principal weedy place for length (in Concord) is from boat's place to oak; for density, shallowness, and length, all together, is Barrett's Bar.

The swifter places *that I remember*, between Fair Haven Pond and Ball's Hill, *leaving out bridges*,[1] are: —

Clamshell
Hubbard's Bath
Merrick's
Island shoal, etc.

[1] Aug. 4th. I do not remember any of consequence above except amid weeds at Rice's Bend.

French Rock, etc., the shoal below
Rocks below Old North Bridge
Barrett's Bar
Sharp Bend Reach
Holt's Ford

That is, generally the shoal and weedy places, but also where the obstruction is a sharp bend or rocks.

July 6. My English cress (*Nasturtium officinale*) at Depot Field Brook is in bloom, and has already begun to go to seed, turning purplish, as it withers (from white).

P. M. — To Lee's Cliff.

The fields are now purplish with the anthers of the herd's-grass, which is apparently at its height.

Grass now for a week or more has been seriously in the way of the walker, but already I take advantage of the few fields that are mowed. It requires skillful tacking, a good deal of observation, and experience to get across the country now.

At Lee's Cliff, pellitory apparently not long, yet I see small green fruit. The gymnostichum grass just begun.

The heart-leaf flower is now very conspicuous and pretty (3 P. M.) in that pool westerly of the old Conantum house. Its little white five-petalled flower, about the size of a five-cent-piece, looks like a little white lily. Its perfectly heart-shaped floating leaf, an inch or more long, is the smallest kind of pad. There is a single pad to each slender stem (which is from one to several feet long in proportion to the depth of the water), and these padlets cover sometimes, like an imbrication, the whole

surface of a pool. Close under each leaf or pad is concealed an umbel of ten to fifteen flower-buds of various ages, and of these one at a time (and sometimes more) curls upward between the lobes of the base, and expands its corolla to the light and air about half an inch above the water, and so on successively till all have flowered. Over the whole surface of the shallow pool you see thus each little pad with its pretty lily between its lobes, turned toward the sun. It is simply leaf and flower.

Galium pilosum, how long?

July 7. P. M. — To Great Meadows.

P. Hutchinson says he once found a wood duck's nest in a hollow maple by Heywood's meadow (now by railroad), and tried to get the young as soon as hatched, but they were gone too soon for him.

On the first, or westerly, part of the Great Meadows, *i. e.* the firmer parts and the bank, I find, mixed with sedges of different kinds, much red-top (coloring the surface extensively), fowl-meadow (just begun to bloom and of a purplish lead-color, taller than the red-top), the slender purple-spiked panic, *Agrostis* (*perennans?* or *scabra??*). In the wet, or main, part, beside various other sedges, — as [*Carex*] *stellulata*, *lanuginosa*, *stricta*, etc., etc., — wool-grass, now in flower, a sedge (apparently *C. ampullacea* var. *utriculata* toward Holbrook's) thicker-culmed than wool-grass, but softer and not round, with fertile spikes often three inches long, and slender. A great part of the meadow is covered with, I think, either this or wood grass (not in flower). I am not

certain which prevails, but I think wool-grass, which does not flower. Also, mixed with these and lower, dulichium, *Eleocharis palustris*, etc., etc.[1]

First notice pontederia out; also tephrosia, how long?

The note of the bobolink has begun to sound rare?

Do not young nighthawks run pretty soon after being hatched? I hear of their being gone very soon.

Bathing at Barrett's Bay, I find it to be composed in good part of sawdust, mixed with sand. There is a narrow channel on each side, deepest on the south. The potamogeton is eight feet long there in eighteen inches of water.

I learn from measuring on Baldwin's second map that the river (*i. e.* speaking of that part below Framingham) is much the straightest in the lower part of its course, or from Ball's Hill to the Dam.

It winds most in the broad meadows. The greatest meander is in the Sudbury meadows.

From upper end of Sudbury Canal to Sherman's Bridge direct is 558 rods (1 mile 238 rods); by thread of river, 1000 rods (3 miles 40 rods), or nearly twice as far.

But, though meandering, it is straighter in its general course than would be believed. These nearly twenty-three miles in length (or 16 + direct) are contained within a breadth of two miles twenty-six rods; *i. e.*, so much it takes to meander in. It can be plotted by the scale of one thousand feet to an inch on a sheet of paper seven feet one and one quarter inches long by eleven inches wide.

[1] *Vide* back, June 16th.

The deep and lake-like are the straightest reaches. The straightest reach within these limits above Ball's Hill is from Fair Haven Pond to Clamshell Hill.

I observed in Maine that the dam at the outlet of Chesuncook Lake, some twenty miles off, had raised the water so as to kill the larches on the Umbazookskus extensively. They were at least four or five miles up the Umbazookskus.

July 8. *Friday.* I see an emperor moth (*Attacus Cecropia*), which came out the 6th.

P. M. — To Clamshell by river.

The *Carex Muhlenbergii* is common on Clamshell slope, just beyond the ravine.

Thimble-berries have begun.

The islands of the river, below the Assabet especially, — as Hosmer's, and the one just below French's Rock, — are now covered with canary grass, which has almost entirely done and closed up; fowl-meadow (*Poa serotina*), now fairly begun to bloom (first noticed the middle of June its slender green panicles shaped like a green red-top); *Glyceria fluitans*, going out of bloom; also the sensitive fern (the "hand leaf" of haymakers); pipes; (and sedges, which might be named as soon as any, as the *crinita* which overhangs the water).

I judge that in a freshet the water rises higher as you go down the river, both from the height to which it rose last March, as shown me at several bridges, and from the height of the bridges themselves, which the builders have been gradually compelled to raise, for the most part just above high-water mark.

July 9. Paddle up river and sound a little above Fair Haven Pond.

See young kingbirds which have lately flown perched in a family on the willows, — the airy bird, lively, twittering.

The water having gone down, I notice a broad red base to the bayonet rush, apparently the effect of the water, even as the maples (of both kinds) and the polygonums are reddened. The bayonet rush is not quite out.

I see, at length, where the floated meadow (on Hubbard's meadow) came from last spring, — from opposite Bittern Cliff, and some below. There is a pond created in the meadow there, some five rods by four and three to three and a half feet deep, water being eleven and a half inches above summer level, — a regular oval pond, where nothing rises above water, but I see pontederia grass-like leafets springing up all over the bottom. The piece taken out here probably contained no button-bushes. So much of the meadow which has been moved [?] is thus converted into a pool. Close by, south, are still larger scars, where masses of button-bush thicket have been ripped up. No doubt some of those on Hubbard's meadow came from here. The water where they stood is about the same depth as in the other place. I see a piece of floated button-bush on the south side of Fair Haven Pond, west of the old boat place of Baker Shore, which is twelve rods long by one rod wide, and, in two or three pieces [*sic*] where it is several thicknesses, it is full three feet thick of solid earth. The whole is set in a straight line separating the meadow in the rear

from the pond, forming, in fact, just such a brink there as exists in perfection on the west side of the pond. This might be called brink-bush, or drift-bush, river-fence. It is the floating fencing-stuff of the river. Possibly that (in the spring) island south of the mouth of Well Meadow Brook, and even the large island in the pond, had its beginning thus, not only willows but maples and alders having at length sprung up on it and built it up.

The next day (10th) I see, just above Sherman's Bridge, on the east side, a piece, some eight rods long by one rod wide, arranged as a brink separating a meadow from the river in the same manner, and, a quarter of a mile higher up on the same side, a more or less broken piece which I estimated by my eye to be five rods by twelve, the largest mass or collection of the kind moved together that I ever saw. I have seen six pieces moved last March, or spring, which contained all together more than half an acre. There was more than a quarter of an acre in the last piece alone.

The button-bush and black willow generally grow together, especially on the brink of the stagnant parts of the river. (Very little comparatively in the great Sudbury meadow and in our Great Meadows.) Perhaps they are there carried off by the ice. They stand generally in line (sometimes half a dozen rods wide) on the brink of the river, separating it from some (commonly narrow) meadow behind, and at high water are a distinct line of separation, rising above the surface and indicating the summer boundary. The best example is at Fair Haven Pond, west side. It is often pretty deep water quite up to the bushes, or there are pads, etc., out-

side them. There they stand in massive and regular straight or curving lines, and you suppose that they have stood there for ages. But I have seen twelve rods together (*i. e.* in one piece) of such fence, the whole width of it transplanted half a mile to some shore where there was none, and forming a fence to the pond or river there. We are accustomed to refer changes in the shore and the channel to the very gradual influence of the current washing away and depositing matter which was held in suspension, but certainly in many parts of our river the ice which moves these masses of bushes and meadow is a much more important agent. It will alter the map of the river in one year. The whole shore for forty rods on the east side below Bittern Cliff was stripped of its button-bushes and willows, etc., etc., last spring, and as I floated over the river there to-day, I could not at first account for the remarkable breadth of the river there, like a bay. I got a very novel impression of the size of the river, though it is now low water. In fact the width of the river has been increased fully three or four rods for more than forty rods in length, and is three to four feet deep on that side now. You cannot tell, of any clump or row of button-bushes, whether it grew up where it stands or was thus set out there. I have seen these masses, sunk in midstream, produce a small weedy spot the same year, and possibly a large mass might thus form an extensive shallow and weedy place or island.

Potamogetons begin to prevail at five and a half feet in sluggish water (at summer level), though they will still be visible when the water rises higher, rising with it. They appear at four and a half, if more rapid, and

are densest at three feet, if the stream is not exceedingly rapid.

The kalmiana lily grows to seven and a half feet (summer level) where it is sluggish (and is still atop when it is a foot or two deeper), and you see this, the heart-leaf, utricularia, and potamogeton, all together, in five feet [of] water (also in same place when a foot or two higher). The front-rank polygonum grows outside the pontederia, next to the potamogeton, and, near the causeway bridge, in Wayland, reaches (except four or five feet) quite across the river (three feet [of] water).

We have not only the Assabet uniting with the main stream about in the middle of the township, but three highways thus raying out in different directions, — as great an amount of river within these limits as could well be. Neither stream runs direct through the town. The main stream runs first northerly or northwesterly and then northeasterly, and perhaps this is as convenient for sailing in flat-bottomed boats as any arrangement could be, the prevailing winds being northwest and southwest, but sailing is much affected by hills, woods, etc.

To-day, July 9th, water is eleven and a half inches above summer level.

July 10. Water ten and a half inches above summer level.

8 A. M. — Take boat at Fair Haven Pond and paddle up to Sudbury Causeway, sounding the river.

To-day, like yesterday, is very hot, with a blue haze concealing the mountains and hills, looking like hot dust in the air.

Hearing a noise, I look up and see a pigeon woodpecker pursued by a kingbird, and the former utters loud shrieks with fear.

Paddling through the wild Sudbury meadows, I am struck with the regularity with which the phalanxes of bulrushes (*Scirpus lacustris*) occur. They do not grow in a continuous line, like pipes or pontederia, but in small isolated patches. At each bend, though it does not appear on Baldwin's map, there is a bay-like expansion of the river, now half emerged, thus: —

where the more stagnant water has deposited mud, and in each such place, with remarkable regularity, a phalanx of bulrushes presents itself as you ascend. It occasionally occupies a corresponding place as you descend, and also intermediate shores of a similar character. Yet it so constantly occurs in just this position as to be remarkable. It is not very common along our river, being mainly confined to the larger and wilder meadows, — at any rate to the expansions, be they larger or smaller. These phalanxes are from one to three or more rods wide, and the rush is of a glaucous green, very interesting with its shafts slanting different ways. At one bend,

especially, grows — and I have not noticed it elsewhere except in this meadow — the great *Scirpus fluviatilis* (how long out?). Yet the leaves are not so roughish nor so long as described.

The *Arundo Phragmites* is not nearly out, though quite tall. *Spartina cynosuroides* well out. The green pipes border the stream for long distances.

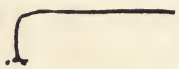
The high water of the last month has left a whitish scum on the grass.

We scare up eight or a dozen wood ducks, already about grown. The meadow is quite alive with them.

What was that peculiar loud note from some invisible water-fowl near the Concord line? Any kind of plover? or clapper rail?

H. Buttrick says he has shot a meadow-hen much larger than the small one here. I hear in the ridge the peculiar notes of, I think, the meadow-hen, — same *e. g.* [*sic*] where I got an egg and nest. The young are probably running there. Often hear it in the great Sudbury meadow.

See many young birds now, — blackbirds, swallows, kingbirds, etc., in the air. Even hear one *link* from a bobolink.

I notice at Bittern Cliff that the sparganium floats upstream,  probably because the wind has blown thus.

The bottom of Fair Haven Pond is very muddy. I can generally thrust a pole down three feet into it, and it may be very much deeper.

Young pouts are an inch long, and in some ditches left high and dry and dead with the old.

July 11. Another hot day with blue haze, and the sun sets red, threatening still hotter weather, and the very moon looks through a somewhat reddish air at first.

The position of the button-bushes determines the width of the river, no less than the width or depth of the water determines the position of the button-bushes. We call that all river between the button-bushes, though sometimes they may have landed or sprung up in a regular brink fashion three or four rods further from, or nearer to, the channel.

That mass (described on the 9th, seen the 10th) in the Wayland meadows above Sherman's Bridge was, I think, the largest mass drifted or growing at all on that great meadow. So this transplantation is not on an insignificant scale when compared with [the] whole body that grows by our river. The largest single mass on the Wayland meadows, considering both length and breadth, was the recently drifted one. To-day the farmer owns a meadow slightly inclined toward the river and generally (*i. e.* taking the year together) more or less inundated on that side. To-morrow it is a meadow quite cut off from the river by a fence of button-bush and black willow, a rod or more in width and four to seven or eight feet high, set along the inundated side and concealing the river from sight.

I hear that Mr. and Mrs. Such-a-one are "going to the beach" for six weeks. What a failure and defeat this suggests their lives to be! Here they live, perchance, the rest of the year, trying to do as they would be done by and to exercise charity of all kinds, and now at last, the parents not having realized their aspirations in the

married state, and the misses now begun to be old maids without having found any match at all, succumb and slope to the beach for six weeks. Yet, so far from being felt to be a proof of failure in the lives of these Christians, it is thought to be the culminating-point of their activity. At length their season of activity is arrived, and they go to the beach, they energetically keep cool. They bathe daily and are blown on by the sea-breeze. This keeps their courage up for the labors of the year. This recess which the Sabbath-school teachers take! What if they were to abide, instead, with the caravan of sweltering pilgrims making their way over this Sahara to their Mecca?

We hear at length that Miss Such-a-one, now well advanced in years, has at length shut up house and gone to the beach. Man servant and maid servant went long ago to prepare the way for her, — to get the bottles of all kinds ready. She has fought the good fight here until at length no shield nor pretense will serve, and now she has gone to the beach, and have not her principles gone with her? She has flitted to Swallow Cave, where, perchance, no duties lurk.

Ah, shall we not go to the beach after another fashion some of us one day? Think of the numbers who are imbeached by this time! How they flutter like devil's-needles and butterflies commingled along our pontederia'd shores!

They have gone and left an empty house. The silver is cached, as prairie travellers leave behind provisions which they expect to return to. But the rent of the last house goes on nevertheless, and is to be added to the

board at the great watering-place. So is it with every domicil we rent; the rent never ceases, but enlarges from year to year. They have gone to the beach to get a few pebbles, which help digestion for the rest of the year.

July 12. Another hot day. 96° at mid-afternoon.

P. M. — To Assabet Bath.

The elm avenue above the Wheeler farm is one of the hottest places in the town; the heat is reflected from the dusty road. The grass by the roadside begins to have a dry, hot, dusty look. The melted ice is running almost in a stream from the countryman's covered wagon, containing butter, which is to be conveyed hard to Boston market. He stands on the wheel to relieve his horses at each shelf in the ascent of Colburn Hill.

I think I have distinguished our eriophorums now. There is the *E. vaginatum*, the earliest, out long ago; the *E. polystachyon*, well out June 19th; and to-day I see the *E. gracile*, which apparently has not been out quite so long as the last. Its leaves are channelled triangular. Saw yesterday the *E. Virginicum*, apparently in bloom, though very little woolly or reddish as yet, — a dense head.

The taller dark rhynchospora is well out.

In the evening, the moon being about full, I paddle up the river to see the moonlight and hear the bullfrogs. The toads and the pebbly *dont dont* are most common. There are fireworks in the village, — rockets, blue lights, etc. I am so far off that I do not hear the rush of the

rocket till it has reached its highest point, so that it seems to be produced there. So the villagers entertain themselves this warm evening. Such are the[ir] aspirations.

I see at 9.30 P. M. a little brood of four or five barn swallows, which have quite recently left the nest, perched close together for the night on a dead willow twig in the shade of the tree, about four feet above the water. Their tails not yet much grown. When I passed up, the old bird twittered about them in alarm. I now float within four feet, and they do not move or give sign of awaking. I could take them all off with my hand. They have been hatched in the nearest barn or elsewhere, and have been led at once to roost here, for coolness and security. There is no cooler nor safer place for them. I observe that they take their broods to the telegraph-wire for an aerial perch, where they teach them to fly. They have gone to their beach.

July 14. P. M. — Sounded river from Ball's Hill (*i. e.* off Squaw [?] Harbor) to Atkins's boat-house corner.

The river, in all the above distance, nowhere washes the base of an isolated (*i. e.* to except long, lowish hill-banks like Clamshell, etc.) steep hill, without a greater depth off it.

The average depth between Sudbury Causeway and Atkins's boat-house bend at wall, or for fifteen miles two hundred and eighty-two rods, is eight and one eighth feet.

There extends from Tarbell Hill to Skelton Bend what I will call the Straight Reach, a mile and a third

long and quite straight. This is the finest *water* view, making the greatest impression of size, of any that I know on the river. It is very broad, deep, and clear of weeds. Average depth 11+ feet (and at highest water some 19 feet). The bottom is almost everywhere muddy. No weeds in the middle. Measuring on the plan by Baldwin, it is three to four hundred feet wide. The depth is also very uniform, varying but little (in the thread) from the average 11+ (except a deep hole and channel at the commencement off Tarbell Hill).

Yesterday (the 13th) Frank Adams brought me a bird's nest and egg from an apple tree near the road by Addison Fay's house. He says it was about twelve feet high in the tree, and it appears to have been in a fork. The nest is most like a kingbird's, or a stout, thick cherry-bird's, or even a very thick tanager's, or a purple finch's half as large again as usual. The egg is the size and form of the phœbe's, but blue-white. The nest is three inches high and five inches wide outside, two inches deep and two and a half wide inside; composed of coarse stubble, strings, coarse root-fibre, etc., externally, and neatly lined with fine withered grass. The egg is pale blue-white, four tenths of an inch long by three tenths wide at the larger end, being broad at one end like a phœbe's. Can it be a cherry-bird's without spots and of the form described by Wilson?

He also has a very large cuckoo's egg, which again makes me suspect that we have the yellow-billed cuckoo.

July 15. P. M. — To Ledum Swamp.

First notice Canada thistle, *Aralia hispida*, *Stachys aspera*, and *Asclepias pulchra*. The *Eriophorum vaginatum* done. The white orchis not yet, apparently, for a week or more. Hairy huckleberry still in bloom, but chiefly done.

Gather a few *Vaccinium Pennsylvanicum*. Raspberries, in one swamp, are quite abundant and apparently at their height.

July 16 *and* 18. Afternoons, I sounded the Assabet as far up as the stone bridge.

This bridge, as I see by the town records, was talked about (*i. e.* the building) in 1807, and was probably built that year or the next (though E. Wood says that the Turnpike Company, who then proposed to build it, did not fulfill their contract). Shattuck's date, 1802, is wrong. Accordingly, by building this narrow bridge here, twenty-five feet in width, or contracting the stream to about one fourth its average width, the current has been so increased as to wash away about a quarter of an acre of land which rises a dozen or fourteen feet above water (or at least an acre four feet in depth) and dig a hole six times the average depth of the stream, twenty-two and a half feet deep, or considerable, *i. e.* three feet, deeper than any place in the main stream from Sudbury Causeway to Atkins's boat-house bend, and all this in fifty years.[1] Yet the depth under the bridge is only two and a half feet plus. It falls in four rods from two and a half to twenty-two and a half.

A considerable island has been formed there, at least

[1] *Vide* July 20th.

three feet and a half above low water, composed of sand, and, two or three rods lower, are deposited the stones, generally larger than a hen's egg, without sand, forming bars and islands quite distinct from the former. This is much the swiftest place on the stream thus far and deeper than any for twenty-five miles of [the] other stream, and consequently there is a great eddy, where I see cakes of ice go round and round in the spring, and, as usual, the shoal water and islands formed by the ruins of the bank and of the bottom are close by. As usual, the shoal water is produced by the rapidity of the current close by.

The sand and gravel are deposited chiefly in the immediate neighborhood of the swiftest water, the swift water producing an eddy. Hence, apparently, the sandy islands at the junction of the rivers, the sand-bar at the swift place on the Assabet, etc. Contract the stream and make it swift, and you will wear a deep hole and make sand-bars and islands below.

The stream is remarkably different from the other. It is not half so deep. It is considerably more rapid. The bottom is not muddy but sandy and occasionally stony. Though far shallower, it is less weedy than the other. In the above distance weeds do not anywhere grow quite across it. A shallowness of two and a half feet does not necessarily bring in weeds, and for long distances three feet is clear of weeds. This is owing, perhaps, not only to the greater swiftness of the current, but to the want of mud under the sand. The banks and bars are peculiar. They are commonly composed of a fine sand mixed with sawdust, shavings, etc., in which the

black willow loves to grow. I know of no such banks on the main stream.

Again there are comparatively few of the large floating potamogetons here. (I do not remember any of the very largest species.) The weeds are chiefly bur-reeds and a slenderer potamogeton and an immersed species (I speak of weeds in the middle). You wonder what makes the difference between this stream and the other. It seems impossible that it should be a geological difference in the beds of the streams so near together. Is it not owing simply to the greater swiftness of this stream? Does not this produce a sandy and gravelly and stony bottom, and so invite a different fauna and flora? I suspect that a fall of two or three inches more in a mile will produce a different fauna and flora to some extent, — the fresh-water sponge, the wood tortoise, the sucker, the kingfisher, the stone-heaps.

It is remarkable how the stones are separated from the sand at the Eddy Bridge and deposited in a bar or islands by themselves a few rods lower down. The sand-bar there, partly under water, looks exactly like a snow-drift. It is a narrow, sharp ridge, extending southwest from the island, with deep water on each side. The sand carried round by the eddy falls there where the ice is observed to loiter most. The large stones are perhaps swept away by a stronger current beneath.

The bars and banks of this stream are peculiar, *i. e.* of fine sand without mud. This indicates a fall and swifter water, and consequently it is on such a stream the mills are built and sawdust and shavings are mixed with such sand to form the bank. One such bank at the

swift place has been recently raised four or five feet above the present level by freshets. It is apparently advancing down-stream.

What is deposited by the eddy occasioned by the narrows is building it up, and so the stream is being narrowed further down. Eddies are the great builders of sand-bars and islands and banks. Any agent that stops the progress of the water downward builds up the bottom in some place.

At the bottom of the deep hole at Eddy Bridge, I felt several water-logged trunks of trees and saw some, which probably were carried round and round by the eddy until they became water-logged and sank.

July 18. One tells me that he stopped at Stedman Buttrick's on the 10th, and found him sitting under a cherry tree ringing a bell, in order to keep the birds off!

If you get on to a rock in the river, *rock* the boat, while you keep steadily pushing, and thus there will be moments when the boat does not rest on the rock at all, and you will rapidly get it off. The river is getting low, so that the entrances to musquash-holes in the bank are revealed and often laid bare, with fresh green rushes or flags, etc., in them.

Nathan Hosmer remembers that when the two new

stone piers at Hunt's Bridge were built, about 1820, one Nutting went under water to place the stones, and he was surprised to see how long he would remain under about this business. Nothing has got built without labor. Past generations have spent their blood and strength for us. They have cleared the land, built roads, etc., for us. In all fields men have laid down their lives for us. Men are industrious as ants.

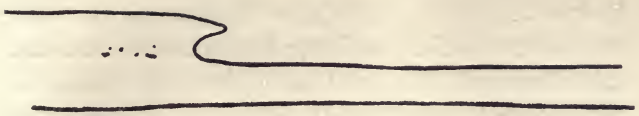
I find myself very heavy-headed these days. It occurs to me that probably in different states of what we call health, even in morbid states, we are peculiarly fitted for certain investigations, — we are the better able to deal with certain phenomena.

N. Barrett says that he has formerly cut six cocks of hay on his bar.

July 19. P. M. — Up Assabet.

The architect of the river builds with sand chiefly, not with mud. Mud is deposited very slowly, only in the stagnant places, but sand is the ordinary building-material.

It is remarkable how the river, while it may be encroaching on the bank on one side, preserves its ordinary breadth by filling up the other side. Generally speaking, up and down this and the other stream, where there is a swift place and the bank worn away on one side, — which, other things being equal, would leave the river wider there, — a bank or island or bar is being built up on the other, since the eddy where, on one side, sand, etc., are deposited is produced by the rapidity of the current, thus: —



e. g. north side of Egg Rock, at Hemlocks, at Pigeon Rock Bend, at Swift Place Bank, etc., and on main stream at Ash Tree Bend. The eddy occasioned by the swiftness deposits sand, etc., close by on one side and a little offshore, leaving finally a low meadow outside where was once the bed of the river. There are countless places where the one shore is thus advancing and, as it were, dragging the other after it.

I dug into that sand-bank, once sand-bar, at the narrow and swift place off Hildreth's, five and a half feet deep, this afternoon. It is more than a rod wide and covered with willows and alders, etc. It is built up four or five feet above the summer level. It is uniformly fine sand, more or less darkened with decayed vegetation, probably much of it sawdust, and it has been deposited this depth here by the eddy at high water within a very recent period. The same agent is in a great many places steadily advancing such a bar or bank down the stream a rod or more from the old shore. The more recent and lower extremity of this bank or bar is composed of sawdust and shavings, almost entirely so to a depth of two feet. Before it reaches the surface, pads spring up in it; when [it] begins to appear, pontederia shows itself, and bulrushes, and next black willows, button-bushes, etc. The finest black willows on the river grow on these sand-banks. They are also much resorted to by the turtles for laying their eggs. I dug up

three or four nests of the *Emys insculpta* and *Sternothærus odoratus* while examining the contents of the bank this afternoon. This great pile of dry sand in which the turtles now lay was recently fine particles swept down the swollen river.

Indeed, I think that the river once ran from opposite Merriam's to Pinxter Swamp and thence along Hosmer's hard land toward the bridge, and all the firm land north of Pinxter Swamp is such a sand-bank which the river has built (leaving its old bed a low meadow behind) while following its encroaching northeast side. That extensive hard land which the river annually rises over, and which supports a good growth of maples and swamp white oaks, will probably be found to be all alluvial and free from stones.

The land thus made is only of a certain height, say four to six feet above summer level, or oftener four or five feet. At highest water I can still cut off this bend by paddling through the woods in the old bed of the river. Islands are formed which are shaped like the curving ridge of a snow-drift.

Stagnant rivers are deep and muddy; swift ones shallow and sandy.

Scirpus subterminalis, river off Hoar's and Cheney's, not long.

July 20. The little Holbrook boy showed me an egg which I unhesitatingly pronounced a peetweet's, given him by Joe Smith. The latter, to my surprise, declares it a meadow-hen's; saw the bird and young, and says the latter were quite black and had hen bills. Can it be so?

Humphrey Buttrick says he finds snipes' nests in our meadows oftener than woodcocks'.

P. M. — To Eddy Bridge.

Abel Hosmer says that the Turnpike Company did not fulfill their engagement to build a new bridge over the Assabet in 1807; that the present stone bridge was not built till about the time the Orthodox meeting-house was built. (That was in 1826.) Benjamin says it was built soon after the meeting-house, or perhaps 1827, and was placed some fifty feet higher up-stream than the old wooden one.

Hosmer says that the eddy and wearing away of the bank has been occasioned wholly by the bridge; that there was only the regular bend there before. He had thought that it was in consequence of the bridge being set askew or diagonally with the stream, so that the abutments turned the water and gave it a slant into the banks, thus:

I think that this did not create, only increased, the evil. The bank which it has worn away rises some sixteen feet above low water, and, considering the depth of the water, you may say that it has removed the sand to a depth of twenty-five feet over an area of a quarter of an acre, or say to the depth of three feet or a yard over two acres, or 9680 cubic yards or cartloads, which, at twenty-five cents per load, it would have cost $2420 to move in the ordinary manner, or enough to fill the present river for a quarter of a mile, calling

it six rods wide and twelve feet deep. Beside creating some small islands and bars close by, this sand and gravel has, of course, been distributed along in the river and on the adjacent meadows below. Hosmer complains that his interval has accordingly been very much injured by the sand washed on to it below, — "hundreds of dollars" damage done to him. All this within some thirty-five[1] years.

It may well be asked what has become of all this sand? Of course it has contributed to form sand-bars below, possibly a great way below.

Jacob Farmer tells me that he remembers that when about twenty-one years old he and Hildreth were bathing in the Assabet at the mouth of the brook above Winn's, and Hildreth swam or waded across to a sand-bar (now the island there), but the water was so deep on that bar that he became frightened, and would have been drowned if he had not been dragged out and resuscitated by others. This was directly over where that island is now, and was then only a bar beginning under water. That island, as he said, had been formed within thirty-five years,[2] or since the Eddy Bridge was built; and I suggest that it may have been built mainly of the ruins of that bank. It is the only island in the Assabet for two and a half miles.

There is a perfect standstill in the eddy at Eddy Bridge now, and there is a large raft of grass, weeds, and lumber perfectly at rest there, against Hosmer's bank. The coarser materials — stones as big as a hen's egg —

[1] Or thirty-two?

[2] Farrar (blacksmith) does not remember such a change.

are dropped close by, but the sand must have been carried far down-stream.

Hosmer says that when he digs down in his millet-field, twenty rods or more from the river, in his interval, at three or four feet depth he comes to coarse stones which look like an old bed of the river. I see them at each of the small wooden bridges, and very likely they underlie the whole of that interval, covered with sand. Such is the character of a river-bottom, — the stones from a hen's egg to the size of your head dropped down to one level, the sand being washed away, and now found in one stratum.

So completely emasculated and demoralized is our river that it is even made to observe the Christian Sabbath, and Hosmer tells me that at this season on a Sunday morning [1] (for then the river runs lowest, owing to the factory and mill gates being shut above) little gravelly islands begin to peep out in the channel below. Not only the operatives make the Sunday a day of rest, but the river too, to some extent, so that the very fishes feel the influence (or want of *influence*) of man's religion. The very rivers run with fuller streams on Monday morning. All nature begins to work with new impetuosity on Monday.

I see where turtles' eggs are still being dug up!

July 21. P. M. — To Assabet, above factory.

For about one third the way from the factory dam to the powder-mills the river is broad and deep, in short a mill-pond.

[1] He should rather say Monday morning.

Harrington has what he calls his Elm Hole, where he thinks he finds the old bed of the river some ten rods from the present. The river in many places evidently once washed the base of hills, from which it is now separated by fifty rods of meadow.

The pontederia on the Assabet is a very fresh and clear blue to-day, and in its early prime, — very handsome to see. The nesæa grows commonly along the river near the powder-mills, one very dense bed of it at the mouth of the powder-mill canal.

The canal is still cluttered with the wreck of the mills that have been blown up in times past, — timber, boards, etc., etc., — and the steep hill is bestrewn with the fragments of the mills, which fell on it more than half a dozen years ago (many of them), visible half a mile off. As you draw near the powder-mills, you see the hill behind bestrewn with the fragments of mills which have been blown up in past years, — the fragments of the millers having been removed, — and the canal is cluttered with the larger ruins. The very river makes greater haste past the dry-house, as it were for fear of accidents.

July 22. Start just before 8 A.M. and sail to the Falls of Concord River.

Water $2\frac{1}{4}+$ inches above summer level. A southwest wind rises and blows us rapidly along.

We are early enough to see the light reflected from the sides of the gyrating water-bugs. Heard from a bittern above the factory yesterday, too large for the small one and too small, perhaps, for the large one, a peculiar hoarse, grating note, lazily uttered, — a bit-

tern's croak, — at 1 P. M., as it flew over the meadows, — a sound perfectly becoming the bird, far as possible from music.

Some have just begun to get the hay on our Great Meadows.

The peetweet, our only beach-bird, teeters along the shore, reminding me that this is an arm of the ocean stream.

At Hill's Bridge we begin to find ourselves shut in by hills, and the character of the shores is fairly changed. There is very little meadow along the stream henceforward, but commonly a firm bank and pastures and cultivated fields — corn and potatoes — down to the shore, for it is commonly a firm shore, though it may be subject to inundation. The shores are still uninhabited, — the road being remote, — especially on the west side, and in the neighborhood of Middle Bridge we find ourselves off the middle of Billerica, the quiet town, and see its rural spire rising above the trees. Many handsome elm-tops and groves of elms are visible in Billerica. There is a fine grove of elms about the first house of the Atkins boat-house. Jug Island is a peculiar one, the only one of the kind that I know in the river, — except the small one at Falls, — firm and rocky, not made by the river, with deep water about it, especially on the east side, always separated from the shore, rising to a considerable height above the surface, — a part of the adjacent rocky range cut off by the river. The interval becomes more and more narrow and sandy or firm below this island and range of hills, and you see red-top and corn on it and woods.

For the last mile above the Falls the river becomes rocky, the rocks gradually increasing in number, until at the Falls its bed is crowded with them. Some of the rocks are curiously water-worn. They are, as usual in our black river, almost as black as ink, — the parts much submerged, — and I notice that bricks and white crockery on the bottom acquire the same color from the water, as if painted black. The water of this river is a black paint-brush which coats all things with fast colors. Rocks half a dozen feet in diameter which were originally of the usual lumpish form

are worn thus by the friction of the pebbles, etc., washed against them by the stream at high water. Several of them have this peculiar sheaf-like form; and black as ink. But, though evidently worn into this form by the rush of water, they are by no means worn smooth, but are as rough as a grater, such being their composition. These are just above the Fordway. There are two pleasant old houses near the Fordway on the east side.

I was surprised to see on the upright sides of these rocks, one or two feet above the present water, very distinct white spots, looking like white paint across the river. Examining, I found them to be three fourths to one inch in diameter of an oval or circular form; the white coating spreading

on to the rock in an irregular fringe like the feet of an insect, increasing their resemblance to a bug, and they were raised one eighth or one tenth of an inch and finely dotted with the contained ova, reminding me of coins, — shaped like bugs or coins, — and I at first bent to read the inscriptions as if they were a work of art. They were full of ova with much water in them or other liquid.[1]

Subtracting two and a quarter inches, I find the water at the Fordway, west side, two and one fourth feet deep, but generally not quite two feet.

Apparently the stream has been cleared of rocks and deepened on the westerly side at the Falls. At the narrowest place, where there is a willow in the middle, there is a clear channel on the west about thirty-five feet wide and four and a quarter feet deep (at deepest), or to the willow thirty-eight and a quarter feet, to opposite shore fifty-four feet more, and about two feet deep at deepest, with many rocks; in all say ninety-two feet.

We lunched about 12 o'clock (having got to the Falls about eleven), sitting on the largest rocky islet there, which, as I remember, may have been four to six rods long, but though it was not six feet above the water, if so much, there was no trace of the water ever having washed over it. Indeed, I *think* it does not rise more than five feet there ever, to judge from appearances. The obvious water-marks were about four feet above the present water. On this rock were dense trees and bushes, grass and soil, etc., etc., only five feet above the

[1] *Vide* Aug. 8th.

present surface and evidently not disturbed by water or ice.

In the very midst of the Falls, on the rocky ridge where is some earth, only a foot or two above the water, grows the nesæa, as also abundantly on the sides. The hibiscus is very common along the neighboring shores.

When I was here a month ago, the water being high, the current was very strong here, so that I could not paddle, perhaps could not have rowed a boat against it at the narrowest place; but now I can paddle against it there, and easily push about anywhere. When the water is high, then, it is strong and hard to resist at all falls and rapids. Now there is not so much of a rush as at the bridge near the powder-mills.

The shores at the Falls are firm and rocky, though for the most part covered densely with bushes, — maples, alders, grape-vines, cat-briars, etc. There is no space for the river to expand in, and it is withal very much contracted in capacity by the rocks in it. Its bed is more or less strewn with rocks for some sixty rods, the largest forming rocky isles with soil and bushes and trees on them, though only some five or maybe six (?) feet high. There is water six and a half feet deep between the Fordway and the narrowest place below.

I was surprised to see on the rocks, densely covering them, though only in the midst of the fall, where was the swiftest water, a regular seaweed, growing just like rockweed and of the same olive-green color, — "*Podostemon Ceratophyllum*, River-weed," — still in bloom, though chiefly gone to seed. Gray says it is "attached to loose stones," and Torrey says it "adheres to pebbles," but

here it covered the rocks under water in the swiftest place only, and was partly uncovered by the fall of the water. I found, in what I gathered, a little pout which had taken refuge in it. Though the botanist, in obedience to his rules, puts it among phænogamous plants, I should not hesitate to associate it with the rockweed. It is the rockweed of our river. I have never seen it elsewhere in the river, though possibly it grows at the factory or other swift places. It seemed as if our river had there for a moment anticipated the sea, suffered a sea-change, mimicked the great ocean stream. I did not see it a few rods above or below, where the water is more sluggish. So far as I know, then, it grows only in the swiftest water, and there is only one place, and that the Falls, in Concord River where it can grow. Gray only speaks of it as growing at "the bottom of shallow streams," Torrey says "at the bottom of shallow pebbly streams," and Bigelow only says it is attached to stones at the bottom. Yet apparently our sluggish river is only a stream, and sufficiently like ordinary rippling streams to admit of its growth at this one spot. A careless observer might confound it with the rockweed of the sea. It covers the rocks in exactly the same manner, and when I tore it off, it brought more or less of the thin, scaly surface of the rocks with it. It is a foretaste of the sea. It is very interesting and remarkable that at this one point we have in our river a plant which so perfectly represents the rockweed of the seashore. This is from four to eight or nine inches long. It has the peculiar strong fresh-water scent.

The west end of Hill's Bridge is (upper side of plank-

ing) eight feet eleven inches above summer level, under side of string-piece seven feet eight inches. I cannot hear that it ever rises on to this bridge, but there is a good deal of fresh drift stuff on the top of the abutment under the string-piece at seven feet eight inches above summer level, apparently washed on in the spring. The upper side of planking at east end is about nine feet eight inches above summer level.

At Turnpike Bridge the water has apparently washed away a part of the abutment some seven and a half feet above summer level.

At Middle Bridge, judging from water-marks on the piers, I should think the water might have risen there seven feet seven inches (more or less) above summer level, *i. e.* up to the timber which rests crosswise on the piers, twenty-two inches below top of planks.

A carpenter who lives (?) at Billerica Corner says the water stood all around the nearest inhabited two-story house to the bridge last spring, so that you could go round it in a boat. (It is the opposite side the road to the river.) I think that this proves a rise here of at least seven feet above summer level and perhaps more.

Therefore, as far as my observation goes, the rise of the river last spring from Sherman's Bridge to Billerica Corner Bridge was very uniform and to about the same height above summer level, but it must fall off rapidly two or three feet or more at the Falls.

I see neither of the small islands which are on Baldwin's map below the Atkins house.

It is a question if the river has as much created the shoal places as found them.

The shallowest place in all the river above described — also from Pelham Pond — is at the Fordway above the Falls, where it is not two and a half [feet] at deepest to-day, and generally only two feet, with a hard bottom and numerous rocks in its bed. It is quite fordable in a carriage.

The weediest place is at the Sudbury causeway. The most of a sand-bar *visibly* formed or forming is Barrett's Bar. If a large piece of meadow should lodge on this, it would help make an island of it rapidly.

The deepest and broadest place is in Fair Haven Pond. I think that the river proper is nowhere so wide as in some parts between Squaw [?] Harbor and Skelton Bend.

The presence or absence of weeds at a given shallowness is a good gauge of the rapidity of the current. At the Fordway they do not grow where it is only two feet on an average, owing to the swiftness of the current (as well as stoniness), and in the very swiftest and narrowest part of the Falls occurs one species, the podostemon, which I have not found in any other part of the river.

The muddiest are the most stagnant parts. The hibiscus and white maple do not occur on the main stream for a long distance above the mouth of the Assabet, maybe ten miles.

It is remarkable how the river, even from its very source to its mouth, runs with great bends or zigzags regularly recurring and including many smaller ones, first northerly, then northeasterly, growing more and more simple and direct as it descends, like a tree; as

if a mighty current had once filled the valley of the river, and meandered in it according to the same law that this small stream does in its own meadows.

A river of this character can hardly be said to fall at all: it rather runs over the extremity of its trough, being filled to overflowing. Its only fall at present (above *the* Falls and this side Framingham) is like the fall produced by a dam, the dam being in this case the bottom in a shallow. If, after flowing twenty miles, all the water has got to rise as high as it was when it started, or rather if it has got to pass over a bottom which is as high as that was where it started, it cannot be said to have gained anything or have fallen at all. It has not got down to a lower level. You do not produce a fall in the channel or bottom of a trough by cutting a notch in its edge. The bottom may lose as much as the surface gains.

Rocks which are covered by freshets a week or more will have lichens on them, as that on my old plan just below the Hemlocks.

If our river had been dry a thousand years, it would be difficult to *guess* even where its channel had been without a spirit level. I should expect to find water-worn stones and a few muddy pools and small swamps.

July 23. P. M. — To Walden.

Going through Thrush Alley and beyond, I am pestered by flies about my head, — *not till now* (though I may have said so before). They are perfect imps, for they gain nothing for their pains and only pester me. They do not for the most part attempt to settle on me,

never sting me. Yet they seriously interfere with walking in the wood. Though I may keep a leafy twig constantly revolving about my head, they too constantly revolve, nevertheless, and appear to avoid it successfully. They leave you only when you have got fairly out of the wood. They seem to do it for deviltry and sport.

The second and fourth, or lake-like, reaches of the river are those in which there is the least fall, if indeed there can be said to be any much of the year. A slight northerly wind, or a shower at the lower end, will make it easier to row up stream than down.

Low blackberries have begun.

I notice the scarlet leaves of the sand cherry, which grows in dry places, and skunk-cabbage leaves have now begun to decay, turning black, and the angelica fall has commenced along the brooks.

Rhexia in bloom, how long? What I call *Juncus scirpoides* is common at Hubbard's Close, and also what I call *Juncus marginatus* (somewhat like the luzula). *Prenanthes alba*, how long? See an early kind of wool-grass, done, of various sizes, and another with larger reflexed sheaths, not begun. *Aster Radula*, how long?

July 24. P. M. — To Ledum Swamp.

The hairy huckleberry still lingers in bloom, — a few of them. The white orchis will hardly open for a week. Mulgedium, how long?

Near the ditch beyond Dennis's Lupine Hill, a vaccinium near to *Pennsylvanicum*, perhaps a variety

of it, with ripe fruit, little or no bloom, broader-leaved than that, and not shining beneath but somewhat glaucous.

July 25. The Rice boy brings me what he thought a snipe's egg, recently taken from a nest in the Sudbury meadows. It is of the form of a rail's egg, but is not whitish like mine, but olive-colored with dark-brown spots. Is it the sora rail? He has also a little egg, as he says taken out of a thrasher's nest, apparently one third grown.

Flagg says that the chimney swallow is sometimes abroad "the greater part of the night;" is informed by Fowler that the rose-breasted grosbeak often sings in the light of the moon.

P. M. — Water three and a half inches above summer level. I measure the rapidity of the river's current. At my boat's place behind Channing's, a bottle sunk low in the water floats one hundred feet in five minutes; one hundred feet higher up, in four and a half minutes. (I think the last the most correct.) It came out a rod and a half ahead of two chips.

July 26. P. M. — To Great Meadows.

I see in Clark's (?) land, behind Garfield's, a thick growth of white birches, apparently three years old, blown from the wood on the west and southwest.

Looking from Peter's, the meadows are somewhat glaucous, with a reddish border, or bank, by the river, where the red-top and *Agrostis scabra* grow, and a greener stream where the pipes are, in the lowest part, by the

Holt, and in some places yellowish-green ferns and now brown-topped wool-grass.

There is much of what I call *Juncus scirpoides* now in its prime in the wetter parts, as also the *Eleocharis palustris*, long done, and *Rhyncospora alba* lately begun. Also buck-bean by itself in very wet places which have lost their crust.

Elodea, how long?

Now observe the darker shades, and especially the apple trees, square and round, in the northwest landscape. Dogdayish.

Methinks the hardhack leaves always stand up, for now they do, and have as soon as they blossomed at least.

July 28. P. M. — Up Assabet.

I see what I take to be young purple finches eating mountain-ash berries (ours). The kingbirds eat currants.

I notice that the common greenish rock lichen (*Parmelia*) grows on the rocks of the Assabet down to within two feet of summer level; *i. e.*, it is submerged perhaps one fourth part of the year.

The black willows are the children of the river. They do not grow far from the water, not on the steep banks which the river is wearing into, not on the unconverted shore, but on the bars and banks which the river has made. A bank may soon get to be too high for it. It grows and thrives on the river-made shores and banks, and is a servant which the river uses to build up and defend its banks and isles. It is married to the river.

Where an eddy is depositing a sand-bar, anon to be elevated into an island or bank, there especially the black willow flourishes. There are certain trees and other plants, as this, the white maple, mikania, etc., which do not grow away from the riverside. The river has not simply to [*sic*] their base, but they accompany *it*, wherever it goes.

The season has now arrived when I begin to see further into the water, — see the bottom, the weeds, and fishes more than before. I can see the bottom when it is five and a half feet deep even, see the fishes, especially the perch, scuttling in and out amid the weeds. Has this clarity anything to do with the greater sluggishness of the water when low? Perhaps you can see furthest into the most sluggish water.

If a tree is undermined and swept down-stream, it lodges in some shallow place, with its branches down-stream, and its butt on the surface, pointing up.

The sweet and plaintive note of the pewee (wood pewee) is now prominent, since most other birds are more hushed. I hear probably young families of them answering each other from a considerable distance, especially about the river. Hear also part of the song of what sounds and looks like a rose-breasted grosbeak. Saw young martins being fed on a bridge-rail yesterday.

July 29. P. M. — To Fair Haven Hill shore.

Ranunculus Flammula var. *reptans* out, also impatiens, noli-me-tangere. The *Cyperus dentatus* in bloom on hard sandy parts of meadows now is very interesting and handsome on being inspected now, with its

bright chestnut purple *sided* flat spikelets, — a plant and color looking toward autumn. Very neat and handsome on a close inspection. *Vide* about Hubbard's brook pickerel ditches. Also in dry sandy soil the little tufts of *Fimbristylis capillaris* in bloom are quite brown and withered-looking now, — another yet more autumnal-suggesting sight. In dry pastures see also the round green heads of the *Cyperus filiculmis*.

The river is very nearly down to summer level now, and I notice there, among other phenomena of low water by the river, the great yellow lily pads flat on bare mud, the *Ranunculus Flammula* (just begun), a close but thin green matting now bare for five or six feet in width, bream nests bare and dried up, or else bare stones and sand for six or eight feet. The white lilies are generally lifted an inch or two above water by their stems; also the *Utricularia vulgaris* and *purpurea* are raised higher above the surface than usual. Rails are lodged amid the potamogetons in midstream and have not moved for ten days. Dog-days and fogs. Rocks unsuspected peep out and are become visible. The water milfoil (the *ambiguum* var. *natans*), otherwise not seen, shows itself. This is observed only at lowest water.

I examined some of these bream nests left dry at Cardinal Shore. These were a foot or two wide and excavated five inches deep (as I measured) in hard sand. The fishes must have worked hard to make these holes. Sometimes they are amid or in pebbles, where it is harder yet. There are now left at their bottoms, high and dry, a great many snails (*Paludina decisa*, also), young and old, some very minute. They either

wash into them or take refuge there as the water goes down. I suspect they die there. The fishes really work hard at making their nests — these, the stone-heaps, etc. — when we consider what feeble means they possess.

Vaccinium vacillans begin to be pretty thick and some huckleberries. See large flocks of red-wings now, the young grown. *Bartonia tenella*, how long?

July 30. A. M. — On river to ascertain the rate of the current.

This dog-day weather I can see the bottom where five and a half feet deep. At five feet it is strewn clear across with sium, heart-leaf, *Ranunculus Purshii*, etc. It is quite green and verdurous, especially with the first. I see the fishes moving leisurely about amid the weeds, their affairs revealed, especially perch, — some large ones prowling there; and pickerel, large and small, lie imperturbable.

I see more moss(?)-covered rocks on the bottom and some rising quite near the surface, — three or four between my boat's place and thirty rods above, — and a good many three feet over on the bottom, revealed in the sunny water, and little suspected before. Indeed, the bottom may be considered rocky from above Dodd's to my boat's place, though you would suspect it only when looking through this clear water. They are so completely covered with moss-like weeds or tresses that you do not see them, — like the heads of mermaids. A rock there is a nucleus or hard core to a waving mass of weeds, and you must probe it hard with a paddle to detect the hard core. No doubt many a

reach is thus rock-strewn which is supposed to have an uninterruptedly muddy bottom. They sleep there concealed under these long tresses on the bottom, suggesting a new kind of antiquity. There is nothing to wear on and polish them there. They do not bear the paint rubbed off from any boat. Though unsuspected by the oldest fisher, they have eyed Concord for centuries through their watery veil without ever parting their tresses to look at her.

Perchance the increased stagnancy of the river at this season makes the water more transparent, it being easier to look into stagnant water than when the particles are in rapid motion.

The outside heart-leaves above Dodd's grow in six feet of water, and also the kalmiana lily. Trying the current there, there being a very faint, chiefly side, wind, commonly not enough to be felt on the cheek or to ripple the water, — what would be called by most a calm, — my bottle floats about seventy-five feet in forty minutes, and then, a very faint breeze beginning to drive it back, I cannot wait to see when it will go a hundred. It is, in short, an exceedingly feeble current, almost a complete standstill. My boat is altogether blown up-stream, even by this imperceptible breath. Indeed, you can in such a case feel the pulse of our river only in the shallowest places, where it preserves some slight passage between the weeds. It faints and gives up the ghost in deeper places on the least adverse wind, and you would presume it dead a thousand times, if you did not apply the nicest tests, such as a feather to the nostrils of a drowned man. It is a mere

string of lakes which have not made up their minds to be rivers. As near as possible to a standstill.

Yet by sinking a strawberry box beneath the surface I found that there was a slight positive current there, that when a chip went pretty fast up-stream in this air, the same with the box sunk one foot and tied to it went slowly down, at three feet deep or more went faster than when the box was sunk only one foot. The water flowed faster down at three feet depth than at one, there where it was about seven feet deep, and though the surface for several inches deep may be flowing up in the wind, the weeds at bottom will all be slanted down. Indeed, I suspect that at four or five feet depth the weeds will be slanted downward in the strongest wind that blows up, in that the current is *always* creeping along downward underneath. After my first experiments I was surprised to find that the weeds at bottom slanted down-stream.

I have also been surprised to find that in the clear channel between the potamogetons, though it looked almost stagnant, it was hard to swim against it; as at Rice's Bend.

See many cowbirds about cows.

P. M. — Left boat at Rice's Bend. I spoke to him of the clapper rail. He remembered that his father once killed a bird, a sort of mud-hen, which they called the tinker, since he made [a] noise just like a tinker on brass, and they used to set it agoing in the meadows by striking two coppers together. His father stuffed it and did not know what it was. It had a long body.

Yet the river in the middle of Concord is swifter than

above or below, and if Concord people are slow in consequence of their river's influence, the people of Sudbury and Carlisle should be slower still.

July 31. 7.30 A. M. — Up river.

C. and I, having left our boat at Rice's Bend last night, walk to it this forenoon on our way to Saxonville.

Water three quarters of an inch above summer level.

It is emphatically one of the dog-days. A dense fog, not clearing off till we are far on our way, and the clouds (which did not let in any sun all day) were the dog-day fog and mist, which threatened no rain. A muggy but comfortable day.

As we go along the Corner road, the dense fog for a background relieves pleasantly the outlines of every tree, though only twenty rods off, so that each is seen as a new object, especially that great oak scrag behind Hubbard's, once bent into a fence, now like a double-headed eagle, dark on the white ground. We go in the road to Rice's on account of the heavy dew, yet the fine tops of red-top, drooping with dew over the path, with a bluish hue from the dew, — blue with dew, — wet our shoes through. The roads are strewn with meadow-hay, which the farmers teamed home last evening (Saturday).

The grass is thickly strewn with white cobwebs, tents of the night, which promise a fair day. I notice that they are thickest under the apple trees. Within the woods the mist or dew on them is so very fine that they look smoke-like and dry, yet even there, if you put your finger under them and touch them, you take off the dew

and they become invisible. They are revealed by the dew, and perchance it is the dew and fog which they reveal which are the sign of fair weather. It is pleasant to walk thus early in the Sunday morning, while the dewy napkins of the cobwebs are visible on the grass, before the dew evaporates and they are concealed.

Returning home last evening, I heard that exceedingly fine z-ing or creaking of crickets (?), low in the grass in the meadows. You might think it was a confused ringing in your head, it is so fine. Heard it again toward evening. Autumnalish.

On the 26th I saw quails which had been picking dung in a cart-path. Probably their broods are grown.

The goldfinch's note, the cool watery twitter, is more prominent now.

We had left our paddles, sail, etc., under one of Rice's buildings, on some old wagon-bodies. Rice, who called the big bittern "cow-poke, baked-plum-pudding."

It is worth the while to get at least a dozen miles on your journey before the dew is off. Stopped at Weir Hill Bend to cut a pole to sound with, and there came two real country boys to fish. One little fellow of seven or eight who talked like a man of eighty, — an old head, who had been, probably, brought up with old people. He was not willing to take up with my companion's jesting advice to bait the fish by casting in some of his worms, because, he said, "It is too hard work to get them where we live."

Begin to hear the sharp, brisk *dittle-ittle-ittle* of the wren amid the grass and reeds, generally invisible.

I only hear it between Concord line and Framingham line.

What a variety of weeds by the riverside now, in the water of the stagnant portions! Not only lilies of three kinds, but heart-leaf, *Utricularia vulgaris* and *purpurea*, all (at least except two yellow lilies) in prime. Sium in bloom, too, and *Bidens Beckii* just begun, and *Ranunculus Purshii* still.

The more peculiar features of Concord River are seen in these stagnant, lake-like reaches, where the pads and heart-leaf, pickerel-weed, button-bush, utricularias, black willows, etc., abound.

Above the Sudbury causeway, I notice again that remarkable large and tall typha, apparently *T. latifolia* (yet there is at least more than an inch interval between the two kinds of flowers, judging from the stump of the sterile bud left on).[1] It is seven or eight feet high (its leaves), with leaves flat on one side (only concave at base, the sheathing part) and regularly convex on the other. They are so much taller than any I see elsewhere as to appear a peculiar species. Long out of bloom. They are what you may call the tallest reed of the meadows, unless you rank the arundo with them, but these are hardly so tall.

The button-bush, which is, perhaps, at the height of its bloom, resounds with bees, etc., perhaps as much as the bass has. It is remarkable that it is these late flowers about which we hear this susurrus. You notice it with your back to them seven or eight rods off.

See a blue heron several times to-day and yesterday.

[1] *Vide* [p. 273].

They must therefore breed not far off. We also scare up many times green bitterns, perhaps young, which utter their peculiar note in the Beaver Hole Meadows and this side.

For refreshment on these voyages, [we] are compelled to drink the warm and muddy-tasted river water out of a clamshell which we keep, — so that it reminds you of a clam soup, — taking many a sup, or else leaning over the side of the boat while the other leans the other way to keep your balance, and often plunging your whole face in at that, when the boat dips or the waves run.

At about one mile below Saxonville the river winds from amid high hills and commences a great bend called the Ox-Bow. Across the neck of this bend, as I paced, it is scarcely twenty rods, while it must be (as I judged by looking, and was told) a mile or more round. Fishermen and others are accustomed to drag their boats overland here, it being all hard land on this neck. A man by the bridge below had warned us of this cut-off, which he said would save us an hour!

A man fishing at the Ox-Bow said without hesitation that the stone-heaps were made by the sucker, at any rate that he had seen them made by the sucker in Charles River, — the large black sucker (not the horned one). Another said that the water rose five feet above its present level at the bridge on the edge of Framingham, and showed me about the height on the stone. It is an arched stone bridge, built some two years ago.

About the Sudbury line the river becomes much narrower and generally deeper, as it enters the first large

meadows, the Sudbury meadows, and is very winding, — as indeed the Ox-Bow was. It is only some thirty or forty feet wide, yet with firm upright banks a foot or two high, — canal-like. This canal-like reach is the transition from the Assabet to the lake-like or Musketaquid portion. At length, off Pelham Pond, it is almost lost in the weeds of the reedy meadow, being still more narrowed and very weedy, with grassy and muddy banks. This meadow, which it enters about the Sudbury line, is a very wild and almost impenetrable one, it is so wet and muddy. It is called the Beaver-Hole Meadows and is a quite peculiar meadow, the chief growth being, not the common sedges, but great bur-reed, five or six feet high and all over it, mixed with flags, *Scirpus fluviatilis*, and wool-grass, and rank canary grass. Very little of this meadow can be worth cutting, even if the water be low enough. This great sparganium was now in fruit (and a very little in flower). I was surprised by the sight of the great bur-like fruit, an inch to an inch and a half in diameter, the fruit-stems much branched and three or four feet high. It is a bur of sharp-pointed cones; stigmas linear. I can hardly believe that this is the same species that grows in C. It is apparently much earlier than ours. Yet ours may be a feeble growth from its very seeds floated down.

Can it be that in this wild and muddy meadow the same plant grows so rankly as to look like a new species? It is decidedly earlier as well as larger than any I find in C. It does not grow in water of the river, but densely, like flags, in the meadow far and wide, five or six feet

high, and this, with the *Scirpus fluviatilis*, etc., makes a very novel sight. Where there are rare, wild, rank plants, there too some wild bird will be found. The marsh wrens and the small green bitterns are especially numerous there. Doubtless many rails here. They lurk amid these reeds. Behind the reeds on the east side, opposite the pond, was a great breadth of pontederia. Zizania there just begun.

This wren (excepting, perhaps, the red-wing blackbird) is the prevailing bird of the Sudbury meadows, yet I do not remember to have heard it in Concord. I get a nest,[1] suspended in a patch of bulrush (*Scirpus lacustris*) by the river's edge, just below the Sudbury causeway, in the afternoon. It is a large nest (for the bird), six inches high, with the entrance on one side, made of coarse material, apparently withered bulrush and perhaps pipes and sedge, and no particular lining; well woven and not very thick; some two and a half or three feet above water. The bird is shy and lurks amid the reeds.

We could not now detect any passage into Pelham Pond, which at the nearest, near the head of this reach, came within thirty rods of the river.

Do not the lake-like reaches incline to run more north and south?

The potamogetons do not abound anywhere but in shallows, hence in the swifter places. The lake-like reaches are too deep for them.

[1] Rice saw one in his meadow (at the Dam Meadows) in Concord half a dozen years ago. I hear of another in Nine-Acre Corner this year.

Cardinal-flower. Have seen it formerly much earlier. Perhaps the high water in June kept it back.

This sixteen miles up, added to eleven down, makes about twenty-seven that I have boated on this river, to which may be added five or six miles of the Assabet.

VI

AUGUST, 1859

(ÆT. 42)

Aug. 1. 6 A. M. — River is at summer level.

This being Monday morning, the river is probably lower than at any other time in the week.

Am surprised to see in water opposite between Monroe's and Dodd's the *Myriophyllum ambiguum* var. *natans*, amid the *Bidens Beckii*. It must have been out (under water) a fortnight. A pretty sprig of pectinate leafets above the capillary-leafed and slimy mass. The *B. Beckii* (just beginning to bloom) just shows a few green leafets above its dark and muddy masses, now that the river is low. Evidently the above two and lilies, cardinal-flowers, etc., depend on the state of the river in June. After a very wet June I think there is less bloom on them. Some years the first two are not noticed at all.

We have now got down to the water milfoil and the *B. Beckii*. These might be called *low-water plants*.[1]

The bottom is occasionally — though quite rarely in Concord — of soft shifting sand, ripple-marked, in which the paddle sinks, under four or five feet of water (as below the ash tree hole), and few weeds grow on such a shallow.

Evidently the hill at Hemlocks would be a flowing sand-hill, if it were not held together by the hemlocks.

[1] *Vide* Aug. 4th.

The common cat-tail (about five feet high by railroad, beyond the South Bridge) has no interval between the two kinds of flowers, but mine of yesterday (*vide* [six] pages back) has, and yet it is much larger than the common. Can it, then, be the *Typha angustifolia*, which is described as smaller and rare?

I see a kingbird hovering within six inches above the potamogetons, front of Cheney's, and repeatedly snapping up some insects, perhaps a devil's-needle.[1]

The west edge of the Rock above Island is eleven and a half inches above summer level.

Now, at 5 P. M., the river has risen an inch and a half since 6 A. M., though we have not had a drop of rain for three days, and then but a few drops, and it fell three quarters of an inch between yesterday (Sunday) morning and this morning. Is this rise owing to the water let on from various mill-ponds this Monday morning?

Aug. 2. I try the current above Dodd's.

There is a southwest breeze. A loose board moves faster than one with a sunk box, but soon drifts diagonally across and lodges at fifty feet.

The box, sunk fourteen inches below the board, floats one hundred feet in nine minutes; sunk two and a half feet, in nine and a quarter minutes; sunk five and a half feet, it is not half-way in thirteen minutes, or, allowing for its starting this time a little out of the wind and current, say it is twenty minutes in going a hundred feet.

I should infer from this that the swiftest and most un-

[1] Often afterward for weeks; stoops from the willows.

interrupted current under all conditions was neither at the surface nor the bottom, but nearer the surface than the bottom. If the wind is down-stream, it is at the surface; if up-stream, it is beneath it, and at a depth proportionate to the strength of the wind. I think that there never ceases to be a downward current.

Rudely calculating the capacity of the river here and comparing it with my boat's place, I find it about as two to one, and such is the slowness of the current, *viz.* nine minutes to four and a half to a hundred feet. If you are boating far it is extremely important to know the direction of the wind. If it blows strong up-stream, there will be a surface current flowing upward, another beneath flowing downward, and a very feeble one (in the lake-like parts) creeping downward next the bottom. A wind in which it is not worth the while to raise a sail will often blow your sailless boat up-stream.

The sluggishness of the current, I should say, must be at different places as the areas of cross-sections at those places.

That fine z-ing of locusts in the grass which I have heard for three or four days is, methinks, an August sound and is very inspiriting. It is a certain maturity in the year which it suggests. My thoughts are the less crude for it. There is a certain moral and physical sluggishness and standstill at midsummer.

I think that clams are chiefly found at shallow and slightly muddy places where there is a gradually shelving shore. Are not found on a very hard bottom, nor in deep mud.

All of the river from the southwest of Wayland to off

the Height of Hill [*sic*] below Hill's Bridge is meadowy. This is the true Musketaquid.

The buttonwood bark strews the streets, — curled pieces. Is it not the effect of dry weather and heat? As birds shed their feathers, or moult, and beasts their hair. Neat rolls of bark (like cinnamon, but larger), light and dark brown.

Aug. 3. 6 A. M. — River fallen one inch since 2.30 P. M. yesterday; *i. e.*, it is now a quarter of an inch above summer level. *Juncus Greenei* grows in river meadow opposite Dodd's; long done.

I saw (the 31st *ult.*) that the river was narrowed to a third its width by a large mass of button-bushes sunk in the middle of it above the Sudbury causeway. The low water reveals a mass of meadow sunk under the railroad bridge. Both this and Lee's Bridge are thus obstructed this year.

I should say the origin of these holes was that the river, being shallow and therefore crowded, runs swiftly and digs into the bank and so makes a deep hole and a bend. The three large lakes may perhaps be considered as three deep holes made by a larger river or ocean current in former ages.

The almost constant occurrence of a bay, or stagnant expansion, on the convex side at the bends is remarkable. It seems to be a place where the river has formerly flowed, but which, by wearing into the opposite bank, it has left.

There are about twenty-one weedy places (*i. e.*, where the weeds extend quite across), all together about two

miles in length. These weedy places, you may say (notwithstanding the frequent winding of the river), generally occur at bends (the Island shoal, perhaps, and Barrett's Bar, and above Middlesex Turnpike Bridge are exceptions).

The most remarkable bend between Framingham and the Dam is the Ox-Bow in Framingham.

Since our river is so easily affected by wind, the fact that its general course is northeast and that the prevailing winds in summer are southwest is very favorable to its rapid drainage at that season.

If by fall you mean a swifter place occasioned by the bottom below for a considerable distance being lower than the bottom above for a considerable distance, I do not know of any such between Pelham Pond and the Falls. These swifter places are produced by a contraction of the stream, — chiefly by the elevation of the bottom at that point, — also by the narrowing of the stream.

The depths are very slight compared with the lengths. The average depth of this twenty-five miles is about one seventeen thousandth the length; so that if this portion of the river were laid down on a map four feet long the depth would be about equal to the thickness of ordinary letter paper, of which it takes three hundred and fifty to an inch. Double the thickness of the letter paper, and it will contain the deep holes which are so unfathomed and mysterious, not to say bottomless, to the swimmers and fishermen.

Methinks the button-bushes about Fair Haven indicate a muddy but not deep pond.

The deepest reach of this twenty-five miles is from E. Davis Hill to Skelton Bend.

Methinks I saw some of the fresh-water sponge in the river in Framingham.

Undoubtedly, in the most stagnant parts of the river, when the wind blows hard up-stream, a chip will be drifted faster up-stream than ever it floats downward *there* in a calm.

P. M. — I see two or three birds which I take to be rose-breasted grosbeaks of this year. They are speckled brown and white (with considerable white) birds, and no rose on breast that I see. I hear them singing a little in a grosbeak-like strain, but a more partial warble. Heard one July 28th on an oak high up Assabet, and to-day on an apple tree near Brister's.

Warren Miles tells me that in mowing lately he cut in two a checkered "adder," — by his account it was the chicken snake, — and there was in its stomach a green snake, dead and partly digested, and he was surprised to find that they ate them.

Water-bugs are collected in dense swarms about my boat, at its stagnant harbor. They gyrate in a very leisurely manner under my face, occasionally touching one another by their edges a moment. When I move or disturb the water, they at once begin to gyrate rapidly. After the evening has set in, I perceive that these water-bugs, which all day were collected in dense swarms in the stagnant water amid the weeds at the sides, are dispersed over the river (quite across it here) and gyrating rapidly in the twilight.

The haymakers are quite busy on the Great Meadows, it being drier than usual. It being remote from public view, some of them work in their shirts or half naked.

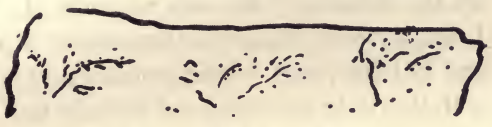
As I wade through the middle of the meadows in sedge up to my middle and look afar over the waving and rustling bent tops of the sedge (all are bent northeast by the southwest wind) toward the distant mainland, I feel a little as if caught by a rising tide on flats far from the shore. I am, as it were, cast away in the midst of the sea. It is a level sea of waving and rustling sedge about me. The grassy sea. You feel somewhat as you would if you were standing in water at an equal distance from the shore. To-day I can walk dry over the greater part of the meadows, but not over the lower parts, where pipes, etc., grow; yet many think it has not been so dry for ten years! Goodwin is there after snipes. I scare up one in the wettest part.

High blackberries begin to be ripe.

A novel phenomenon of dry weather and a low stage of water is the sight of dense green beds of *Eleocharis acicularis*, still in bloom, which grows at the bottom of muddy pools, but now, they being dry, looks like a dense fine bed of green moss, denser than grass. I recline on such a bed, perfectly dry and clean, amid the flags and pontederia, where lately was water and mud. It covers the mud with a short dense green mat of culms fine as a hair, quite agreeable to rest on and a rather novel sight.

Aug. 5. See many yellowed peach leaves and butternut leaves, which have fallen in the wind yesterday and the rain to-day.

The lowest dark-colored rocks near the water at the stone bridge (*i. e.* part of the bridge) are prettily marked with (apparently) mosses, which have adhered to them at higher water and [are] now withered and bleached on, — in fact are transferred, — and by their whitish color are seen very distinctly on the dark stone and have a very pretty effect. They are quite like sea-mosses in their delicacy, though not equally fine with many. These are very permanently and



closely fastened to the rock. This is a phenomenon of low water. Also see them transferred to wood, as pieces of bridges.

Aug. 8. P. M. — Up Assabet.

I perceive that rocks on the bottom stretch across from Mantatuket Point to the Island, and probably make the ancient core of the shoals and islands, and the river has cut through above and between them and made them islands, just as it at high water cuts off and makes an island of Mantatuket Rock itself; *i. e.*, the shallows below the junction are to be considered as the point of the hill, at least the rocky portion of them.

I find the same curious eggs (which I saw at the Fordway on the 22d) on the rocks and trees on the Assabet, always on the upright, or steep, sides of rocks in the water or on bare-barked (or perhaps denuded of bark) trees on the edge of the river and overhanging

it. Are they to be found up the main stream? They are not yet hatched.[1]

Peetweets take their flight over the water, several together, apparently the old with their young now grown, the former (?) uttering a peculiarly soft rippling call. That is, it is not now a sharp, ringing note.

The river, now that it is so clear and sunny, is better than any aquarium. Standing up and pushing gently up the stream, or floating yet more quietly down it, I can, in some places, see the secrets of half the river and its inhabitants, — the common and familiar bream with the dusty light reflected from its fins, the vigorous-looking perch, tiger-like among fishes (I notice that many of the perch are poised head downward, peeping under the rocks), the motionless pickerel with reticulated back and sides, as it were the seed-vessel of a water-plant, eyes set far back. It is an enchanter's wand ready to surprise you with life.

The weeds are as indispensable to the fishes as woods and shrubbery to us. I saw a perch conceal himself from my sight under a tuft of weeds at the bottom not much wider than its own length. That potamogeton (is it *P. Robbinsii?*) growing in dense beds under water, all immersed in shallow places, like a bed of brown and muddy ostrich-feathers, alternating with darker beds of *Bidens Beckii*, which show but a particle of green above the surface (I think of the latter in the South Branch), — what concealment these afford to turtles, frogs, fishes, etc.! The potamogetons are so thick in some places in the main stream that a frog might hop

[1] *Vide* Aug. 11th.

quite across the river on them without getting in over his head.

Rice has had a little experience once in pushing a canal-boat up Concord River. Says this was the way they used to get the boat off a rock when by chance it had got on to one. If it had run quite on, so that the rock was partly under the main bottom of the boat, they let the boat swing round to one side and placed a stout stake underneath, a little aslant, with one end on the bottom of the river and the other ready to catch the bows of the boat, and while one held it, perhaps, the other pushed the boat round again with all his force, and so drove it on to the stake and lifted it up above the rock, and so it floated off.

Aug. 9. I see under the railroad bridge a mass of meadow which lodged there last spring, not revealed till this low water, and this is now dense with a thrifty growth of bulrushes.

Minott says that some used to wonder much at the windings of the Mill Brook and could not succeed in accounting for them, but his Uncle Ben Prescott settled the difficulty by saying that a great eel came out of Flint's Pond and rooted its way through to the river and so made the channel of the Mill Brook.

Minott says that he can remember when (it may be forty or fifty years ago) the Great Meadows were so dry one year that, they having got off all the grass and cut it quite smoothly, they talked seriously of having a regimental muster there. He assured me it would have been a good place, for the grass was cut smooth, and the

earth was baked so hard that you could ride in a carriage right through the middle from the west end clear to Neck. Cannon could have been dragged about there perfectly well. I was thinking it would be rather *tussocky* ground for soldiers to wheel and manœuvre on, and rather damp to camp on, but he declared not. This appeared to be good evidence for the river meadow proprietors. But when I asked him if he thought the meadows were more wet now than fifty years ago, he answered that he did "not think they were," nor the grass any poorer. As he remembered, in one of those years, not far from the dry one referred to, there came a rain in August, when the meadows were partly cut, which raised the water so that it floated off what was left cut and went over the tops of the standing grass, and you could have gone all over the meadows in a boat, and he saw there on the meadows such an immense swarm of sea-birds of various kinds — peeps, plover, yellow-legs, etc. — as he never saw before nor since. He thinks he saw so many in one flock as could not have been packed into his kitchen. He had never seen anything at all like it but once since, and that was the day after he had been to a muster with his company at Waltham — when he was a young man — and had saved the greater part of his allowance of powder on the field. The next day, after getting home, the yellow-legs were so thick on the Mill Brook meadows that he killed a bushel of them.

I saw the tortoises shedding their scales a week ago. Many of the scales two-thirds off, turned up all around.

Aug. 11. A. M. — Up Assabet to stone bridge.

This river is so shallow that you can easily push up it with a paddle, but the other is commonly too deep for this.

As I paddle up this stream this forenoon, the river gently rising as usual in the forenoon (in consequence of raising the gates of the various mill-ponds on and near to it, which had been shut in the night), I meet with many a clam which comes floating down in mid-stream, nicely poised on the water with its pearly concave side uppermost. These have been opened and left by the musquash during the night on the shore, or often on rocks in the stream, and now the water rising gently sets them afloat, as with care you can float an iron pot. But soon a stronger wind or eddy will cause the water to break over them and they will at once sink to the bottom. Last night it lay half buried in mud and sand at the bottom. The musquash has devoured its tenant, and now it floats seaward, a pearly skiff set afloat by the industrious millers. I met with as many as a dozen of them coming down the stream this forenoon, the valves at an angle of 45° [*sic*], sometimes a single valve, but the least touch of my oars would sink them.

The musquash are eating clams quite fast there. Those lately opened are generally quite small. Is it because of the season or the stream? When I raked the river the other day, all the clams I caught had closed their shells on the teeth of the rake which entered them, just as they catch sea clams with a pointed stick.

Those singular eggs which I saw at the Falls of Concord River in July (*vide* August 8) are far more numerous at the Assabet stone bridge, and many are hatched. They are sprinkled all over the stones of the arch just within it on the sides, and overhead, but extending only [a] few feet under the bridge on either side.

Aug. 14. P. M. — To Barrett's Bar.

The zizania now makes quite a show along the river, overtopping the withered heads of the early canary grass.

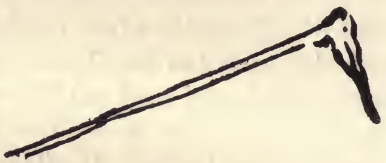
When I reached the upper end of this weedy bar, at about 3 P. M., this warm day, I noticed some light-colored object in mid-river, near the other end of the bar. At first I thought of some large stake or board standing amid the weeds there, then of a fisherman in a brown holland sack, referring him to the shore beyond. Supposing it the last, I floated nearer and nearer till I saw plainly enough the motions of the person, whoever it was, and that it was no stake. Looking through my glass thirty or forty rods off, I thought certainly that I saw C., who had just bathed, making signals to me with his towel, for I referred the object to the shore twenty rods further. I saw his motions as he wiped himself, — the movements of his elbows and his towel. Then I saw that the person was nearer and therefore smaller, that it stood on the sand-bar in midstream in shallow water and must be some maiden [in] a bathing-dress, — for it was the color of brown holland web, — and a very peculiar kind of dress it seemed. But about this time I discovered with my naked eye that it

was a blue heron standing in very shallow water amid the weeds of the bar and pluming itself. I had not noticed its legs at all, and its head, neck, and wings, being constantly moving, I had mistaken for arms, elbows, and towel of a bather, and when it stood stiller its shapely body looked like a peculiar bathing-dress. I floated to within twenty-five rods and watched it at my leisure. Standing on the shallowest part of the bar at that end, it was busily dressing its feathers, passing its bill like a comb down its feathers from base to tip. From its form and color, as well as size, it was singularly distinct. Its great spear-shaped head and bill was very conspicuous, though least so when turned toward me (whom it was eying from time to time). It coils its neck away upon its back or breast as a sailor might a rope, but occasionally stretches itself to its full height, as tall as a man, and looks around and at me. Growing shy, it begins to wade off, until its body is partly immersed amid the weeds, — potamogetons, — and then it looks more like a goose. The neck is continually varying in length, as it is doubled up or stretched out, and the legs also, as it wades in deeper or shallower water.

Suddenly comes a second, flying low, and alights on the bar yet nearer to me, almost high and dry. Then I hear a note from them, perhaps of warning, — a short, coarse, frog-like purring or eructating sound. You might easily mistake it for a frog. I heard it half a dozen times. It was not very loud. Anything but musical. The last proceeds to plume himself, looking warily at me from time to time, while the other continues to edge off through the weeds. Now and then the latter

holds its neck as if it were ready to strike its prey, —

stretched forward over the water, — but I saw no stroke. The arch may be lengthened or shortened, single or double, but the great spear-shaped bill and head are ever the same. A great hammer or pick, prepared to transfix fish, frog, or bird. At last, the water becoming too deep for wading, this one takes easily to wing — though up to his body in water — and flies a few



rods to the shore. It rather flies, then, than swims. It was evidently scared. These were probably birds of this season. I saw some distinct ferruginous on the angle of the wing. There they stood in the midst of the open river, on this shallow and weedy bar in the sun, the leisurely sentries, lazily pluming themselves, as if the day were too long for them. They gave a new character to the stream. Adjutant they were to my idea of the river, these two winged men.

You have not seen our weedy river, you do not know the significance of its weedy bars, until you have seen the blue heron wading and pluming itself on it. I see that it was made for these shallows, and they for it. Now the heron is gone from the weedy shoal, the scene appears incomplete. Of course, the heron has sounded the depth of the water on every bar of the river that is fordable to it. The water there is not so many feet deep,

but so many heron's tibiæ. Instead of a foot rule you should use a heron's leg for a measure. If you would know the depth of the water on these few shoalest places of Musketaquid, ask the blue heron that wades and fishes there. In some places a heron can wade across.

How long we may have gazed on a particular scenery and think that we have seen and known it, when, at length, some bird or quadruped comes and takes possession of it before our eyes, and imparts to it a wholly new character. The heron uses these shallows as I cannot. I give them up to him.

By a gauge set in the river I can tell about what time the millers on the stream and its tributaries go to work in the morning and leave off at night, and also can distinguish the Sundays, since it is the day on which the river does not rise, but falls. If I had lost the day of the week, I could recover it by a careful examination of the river. It lies by in the various mill-ponds on Sunday and keeps the Sabbath. What its *persuasion* is, is another question.

In 1677 the town's "brandmarke" as fixed by the State was .

David Heard says that the cattle liked the pipes so well that they distinguished their rustle from that of other grass as he was bringing them to them, and were eager to get them. The cattle distinguished the peculiar rustle of the pipes in the meadow-hay which was being brought to them, and were eager to get them.

Aug. 17. *Wednesday.* Frost in low ground this morning.

That was purple grass which I saw to-day. I see also the saw-grass in the shorn fields.

Aug. 18. *Thursday.* Half the leaves of some cherries in dry places are quite orange now and ready to fall.

Aug. 21. *Sunday.* P. M. — Walk over the Great Meadows and observe how dry they are. There is quite a drought, and I can walk almost anywhere over these meadows without wetting my feet. It is much drier than it was three weeks ago there. It is like the summer of '54. Almost all the grass has been cut and carried off. It is quite dry crossing the neck of the Holt. In many holes in the meadow, made by the ice, the water having dried up, I see many small fishes — pouts and pickerel and bream — left dead and dying. In one place there were fifty or one hundred pouts from four to five inches long with a few breams, all dead and dry. It is remarkable that these fishes have not all been devoured by birds or quadrupeds. The blue herons must find it easy to get their living now. Are they not more common on our river such years as this?

In holes where the water has just evaporated, leaving the mud moist, I see a hundred little holes near together, with occasionally an indistinct track of a bird between. Measuring these holes, I find them to be some two inches deep, or about the length of a snipe's bill, and doubtless they were made by them. I start one snipe.

People now (at this low stage of water) dig mud for

their compost-heaps, deepen wells, build bank walls, perchance, along the river, and in some places make bathing-places by raking away the weeds. Many are ditching.

Aug. 22. *Monday.* The circles of the blue vervain flowers, now risen near to the top, show how far advanced the season is.

The savory-leaved aster (*Diplopappus linariifolius*) out; how long? Saw the *Aster corymbosus* on the 19th.

Have seen where squirrels have eaten, *i. e.* stripped, many white pine cones, for a week past, though quite green.

That young pitch pine whose buds the crossbills (?) plucked has put out shoots close by them, but they are rather feeble and late.

Riding to the factory, I see the leaves of corn, planted thick for fodder, so rolled by the drought that I mistook one row in grass for some kind of rush or else reed, small and terete.

At the factory, where they were at work on the dam, they showed large and peculiar insects which they were digging up amid the gravel and water of the dam, nearly two inches long and half an inch wide, with six legs, two large shield-like plates on the forward part of the body, — under which they apparently worked their way through wet sand, — and two large claws, somewhat lobster-like, forward. The abdomen long, of many rings, and fringed with a kind of bristles on each side.

The other day, as I was going by Messer's, I was

struck with the pure whiteness of a tall and slender buttonwood before his house. The southwest side of it for some fifty or more feet upward, as far as the outer bark had recently scaled off, was as white, as distinct and bright a white, as if it had been painted, and when I put my finger on it, a white matter, like paint not quite dry, came off copiously, so that I even suspected it was paint. When I scaled off a piece of bark, the freshly exposed surface was brown. This white matter had a strong fungus-like scent, and this color is apparently acquired after a little exposure to the air. Nearly half the tree was thus uninterruptedly white as if it had been rounded and planed and then painted. No birch presents so uniformly white a surface.

It is very dry now, but I perceive that the great star-shaped leaves of the castor bean plants in Mr. Rice's garden at twilight are quite cold to the touch, and quite shining and wet with moisture wherever I touch them. Many leaves of other plants, as cucumbers, feel quite dry.

Aug. 23. P. M. — To Laurel Glen to see the effect of the frost of the 17th (and perhaps 18th).

As for autumnal tints, the *Smilacina racemosa* is yellowed, spotted brown in streaks, and half withered; also two-leaved Solomon's-seal is partly yellowed and withered. Birches have been much yellowed for some time; also young wild cherry and hazel, and some horse-chestnuts and larches on the street. The scarlet lower leaves of the choke-berry and some brakes are the handsomest autumnal tints which I see to-day.

At Laurel Glen, these plants were touched by frost, in the lowest places, *viz.*, the very small white oaks and hickories; dogsbane very generally; ferns generally, — especially *Aspidium Thelypteris* (?), the revolute one at bottom of hollow, — including some brakes; some little chinquapin oaks and chestnuts; some small thorns and blueberry (*Vaccinium vacillans* shoots); aspen, large and tender leaves and shoots; even red maple; many hazel shoots; geraniums; indigo-weed; lespedeza (the many-headed) and desmodium (one of the erect ones); a very little of the lowest locust leaves. These were very small plants and low, and commonly the most recent and tender growth. The bitten part, often the whole, was dry and shrivelled brown or darker. In the river meadows the blue-eyed grass was very generally cut off and is now conspicuously black, — I find but one in bloom, — also small flowering ferns. The cran*berries* (not vines) are extensively frost-bitten and spoiled.

In Moore's Swamp the potatoes were extensively killed, the greenest or tenderest vines. One says that the driest part suffered the most. They had not nearly got ripe. One man had his squash vines killed.[1]

Aug. 24. P. M. — To Conantum.

The small sempervirens blackberry in prime in one

[1] At frosty hollows by Ripple Lake on the 28th, see the effects of the same frost of 17th, — little chinquapin oaklets and the tenderest shoots of *Cornus alba*, the gray dead twigs of the cornel of past years, all their tops; and these two are almost the only shrubs at the bottom. The older cornel leaves have been turned to dark purple, plainly by the frost. Erechthites not touched even Aug. 30th (*vide* Sept. 2d).

place. *Aster puniceus* and *Diplopappus umbellatus*, how long? *Calamagrostis coarctata* not quite, end of Hubbard's meadow wood-path. *Panicum virgatum*, say two or three weeks. Leersia, or cut-grass, some time, roadside, Corner road, by brook.

Aug. 25. Copious rain at last, in the night and during the day.

A. M. — Mountain-ash berries partly turned. Again see, I think, purple finch eating them.

I see, after the rain, when the leaves are rustling and glistening in the cooler breeze and clear air, quite a flock of (apparently) *Fringilla socialis* in the garden.

Aug. 26. The dust is laid, the streets washed, the leaves — the first ripe crop — fallen, owing to yesterday's copious rain. It is clearer weather, and the creak of the crickets is more distinct, just as the air is clearer.

The trees look greener and fresher, not only because their leaves are washed and erected, but because they have for the most part shed their yellow and sere leaves.

The front-rank polygonum is now perhaps in its prime. Where it forms an island in the river it is surmounted in the middle or highest part by the *P. hydropiperoides*.

P. M. — To Fair Haven Hill.

Elder-berries have fairly begun to be ripe, as also the *Cornus sericea* berries, and the dull-reddish leaves of the last begin to be conspicuous.

The creak of the mole cricket has a very *afternoon* sound.

Potato vines are generally browning and rank. Roman wormwood prevails over them; also erechthites, in new and boggy ground, and butterweed. These lusty natives prevail in spite of the weeding hoe, and take possession of the field at last. Potato vines have taken a veil of wormwood. The barn-yard grass and various *panics* (*sanguinale*, *capillare*, and bottle-grass) now come forward with a rush and take possession of the cultivated fields, partly abandoned for the present by the farmer and gardener.

How singular that the *Polygonum aviculare* should grow so commonly and densely about back doors where the earth is trodden, bordering on paths! Hence properly called door-grass. I am not aware that it prevails in any other places.

The pontederia leaves are already slightly imbrowned, though the flowers are still abundant.

The river is a little cooled by yesterday's rain, and considerable heart-leaf (the leaves mainly) is washed up.

I begin to think of a thicker coat and appreciate the warmth of the sun. I see sun-sparkles on the river, such as I have not seen for a long time. At any rate, they surprise me. There may be cool veins in the air now, any day.

Now for dangle-berries. Also *Viburnum nudum* fruit has begun.

I saw a cherry-bird peck from the middle of its upright (vertical) web on a bush one of those large

(I think yellow-marked) spiders within a rod of me. It dropped to the ground, and then the bird picked it up. It left a hole or rent in the middle of the web. The spider cunningly spreads his net for feebler insects, and then takes up his post in the centre, but perchance a passing bird picks him from his conspicuous station.

I perceived for the first time, this afternoon, in one place, a slight mouldy scent. There are very few fungi in a dry summer like this.

The *Uvularia sessilifolia* is for the most part turned yellow, with large green fruit, or even withered and brown. Some medeola is quite withered. Perhaps they are somewhat frost-bitten.

I see a goldfinch eating the seeds of the coarse barnyard grass, perched on it. It then goes off with a cool twitter.

Notice arrowhead leaves very curiously eaten by some insect. They are dotted all over in lines with small roundish white scales, — which your nail will remove, and then a scar is seen beneath, — as if some juice had exuded from each puncture and then hardened.

The first fall rain is a memorable occasion, when the river is raised and cooled, and the first crop of sere and yellow leaves falls. The air is cleared; the dog-days are over; sun-sparkles are seen on water; crickets sound more distinct; saw-grass reveals its spikes in the shorn fields; sparrows and bobolinks fly in flocks more and more. Farmers feel encouraged about their late potatoes and corn. Mill-wheels that have rested for want of water begin to revolve again. Meadow-haying is over.

The first significant event (for a long time) was the frost of the 17th. That was the beginning of winter, the first summons to summer. Some of her forces succumbed to it. The second event was the rain of yesterday.

My neighbor told me yesterday that about four inches of rain had fallen, for he sent his man for a pail that was left in the garden during the rain, and there was about four inches depth of water in it. I inquired if the pail had upright sides. "No," he said, "it was flaring!!" However, according to another, there was full four inches in a tub.

Leersia or cut-grass in prime at Potter's holes.

That first frost on the 17th was the first stroke of winter aiming at the scalp of summer. Like a stealthy and insidious aboriginal enemy, it made its assault just before daylight in some deep and far-away hollow and then silently withdrew. Few have seen the drooping plants, but the news of this stroke circulates rapidly through the village. Men communicate it with a tone of warning. The foe is gone by sunrise, but some fearful neighbors who have visited their potato and cranberry patches report this stroke. The implacable and irresistible foe to all this tender greenness is not far off, nor can we be sure, any month in the year, that some scout from his low camp may not strike down the tenderest of the children of summer. The earliest and latest frosts are not distinguishable. This foe will go on steadily increasing in strength and boldness, till his white camps will be pitched over all the fields, and we shall be compelled to take refuge in our strongholds,

with some of summer's withered spoils stored up in barns, maintaining ourselves and our herds on the seeds and roots and withered grass which we have *embarned*. Men in anticipation of this time have been busily collecting and curing the green blades all the country over, while they have still some nutriment in them. Cattle and horses have been dragging homeward their winter's food.

A *new plant*, apparently *Lycopodium inundatum*, Hubbard's meadow-side, Drosera Flat, not out.

Aug. 27. A little more rain last night.

What were those insects, some winged, with short backs and say half an inch long, others wingless and shorter, like little coils of brass wire (so marked), in dense droves together on trees and fences, — apparently harmless, — especially a week or ten days ago?

I was telling Jonas Potter of my lameness yesterday, whereat he says that he "broke" both his feet when he was young, — I imagined how they looked through his wrinkled cowhides, — and he did not get over it for four years, nay, even now he sometimes felt pains in them before a storm.

All our life, *i. e.* the living part of it, is a persistent dreaming awake. The boy does not camp in his father's yard. That would not be adventurous enough, there are too many sights and sounds to disturb the illusion; so he marches off twenty or thirty miles and there pitches his tent, where stranger inhabitants are tamely sleeping in their beds just like his father at home, and camps in *their* yard, perchance. But then he

dreams uninterruptedly that he is anywhere but where he is.

I often see yarrow with a delicate pink tint, very distinct from the common pure-white ones.

What is often called poverty, but which is a simpler and truer relation to nature, gives a peculiar relish to life, just as to be kept short gives us an appetite for food.

Vilfa vaginæflora (?) well out.

The first notice I have that grapes are ripening is by the rich scent at evening from my own native vine against the house, when I go to the pump, though I thought there were none on it.

The children have done bringing huckleberries to sell for nearly a week. They are suspected to have berries [*sic*] in them.

On the 23d I gathered perfectly fresh and large low blackberries, peculiarly sweet and soft, in the shade of the pines at Thrush Alley, long after they are done in open fields. They seem like a different variety from the common, they are so much sweeter, tenderer, and larger. They do not grow densely but sparingly, now resting on the ground in the shade of their leaves, perfectly ripe. These that have ripened slowly and perfectly in the shade are the sweetest and tenderest, have the least of the *bramble* berry about them.

Elder-berry clusters swell and become heavy and therefore droop, bending the bushes down, just in proportion as they ripen. Hence you see the green cymes perfectly erect, the half-ripe drooping, and the perfectly ripe hanging straight down on the same bush.

I think that some summer squashes had turned yellow in our yard a fortnight or more ago.

There are various ways in which you can tell if a watermelon is ripe. If you have had your eye on the patch much from the first, and so know which formed first, you may presume that these will ripen soonest; or else you may incline to those which lie nearest the centre of the hill or root, as the oldest. Next the dull dead color and want of bloom are as good signs as any. Some look green and livid and have a very fog or mildew of bloom on them, like a fungus. These are as green as a leek through and through, and you 'll find yourself in a pickle if you open one. Others have a dead dark greenness, the circulations being less rapid in their cuticles and their blooming period passed, and these you may safely bet on. If the vine is quite green and lively, the death of the quirl at the root of the stem is almost a sure sign. For fear we should not discover it before, this is placed for a sign that there is redness and ripeness (if not mealiness) within. Of two otherwise similar, take that which yields the lowest tone when struck with your knuckles, *i. e.*, which is hollowest. The old or ripe ones sing base; the young, tenor or falsetto. Some use the violent method of pressing to hear if they crack within, but this is not to be allowed. Above all no tapping on the vine is to be tolerated, suggestive of a greediness which defeats its own purpose. It is very childish. One man told me that he could n't raise melons because his children would cut them all up. I thought that he convicted himself out of his own mouth, and was not fit to be the ruler of a country according to Confucius'

standard, that at any rate he could not raise children in the way they should go. I once saw one of his boys astride of my earliest watermelon, which grew near a broken paling, and brandishing a case-knife over it, but I instantly blowed him off with my voice from a neighboring window before serious damage was done, and made such an ado about [it] as convinced him that he was not in his father's dominions, at any rate. This melon, though it lost some of its bloom then, grew to be a remarkably large and sweet one, though it bore to the last a triangular scar of the tap which the thief had designed on it.

I served my apprenticeship and have since done considerable journey-work in the huckleberry-field, though I never paid for my schooling and clothing in that way. It was itself some of the best schooling I got, and paid for itself. Occasionally in still summer forenoons, when perhaps a mantua-maker was to be dined, and a huckleberry pudding had been decided on, I, a lad of ten, was dispatched to the huckleberry hills, all alone. My scholastic education could be thus far tampered with and an excuse might be found. No matter how few and scarce the berries on the near hills, the exact number necessary for a huckleberry pudding could surely be collected by 11 o'clock. My rule in such cases was never to eat one till my dish was full. At other times when I had companions, some used to bring such curiously shaped dishes that I was often curious to see how the berries disposed of themselves in them. Some brought a coffee-pot to the huckleberry-field, and such a vessel possessed this advantage at least,

that if a greedy boy had skimmed off a handful or two on his way home, he had only to close the lid and give his vessel a shake to have it full again. This was done all round when we got as far homeward as the Dutch house. This can probably be done with any vessel that has much side to it.

I once met with a whole family — father and mother and children — ravaging a huckleberry-field in this wise: they cut up the bushes, and, as they went, beat them over the edge of a bushel basket, till they had it full of berries, ripe and green, leaves, sticks, etc., and so they passed along out of my sight like wild men.

See *Veratrum viride* completely withered and brown from top to bottom, probably as early as skunk-cabbage.

Aug. 28. P. M. — To Walden.

A cool day; wind northwest. Need a half-thick coat. Thus gradually we withdraw into winter quarters. It is a clear, flashing air, and the shorn fields now look bright and yellowish and cool, tinkled and twittered over by bobolinks, goldfinches, sparrows, etc. You feel the less inclined to bathing this weather, and bathe from principle, when boys, who bathe for fun, omit it.

Thick fogs these mornings. We have had little or no dog-days this year, it has been so dry.

Pumpkins begin to be yellow. White cornel berries mostly fallen.

The arrowhead is still a common flower and an important one. I see some very handsome ones in Cardinal Ditch, whose corollas are an inch and a half in diameter. The greater part, however, have gone to

seed. The flowers I see at present are autumn flowers, such as have risen above the stubble in shorn fields since it was cut, whose tops have commonly been clipped by the scythe or the cow; or the late flowers, as asters and goldenrods, which grow in neglected fields and along ditches and hedgerows.

The rhexia in Ebby Hubbard's field is considerably past prime, and it is its reddish chalices which show most at a distance now. I should have looked ten days ago. Still it is handsome with its large yellow anthers against clear purple petals. It grows there in large patches with hardhack.

I hear that some of the villagers were aroused from their sleep before light by the groans or bellowings of a bullock which an unskillful butcher was slaughtering at the slaughter-house. What morning or Memnonian music was that to ring through the quiet village? What did that clarion sing of? What a comment on our village life! Song of the dying bullock! But no doubt those who heard it inquired, as usual, of the butcher the next day, "What have you got to-day?" "Sirloin, good beefsteak, rattleran," etc.

I saw a month or more ago where pine-needles which had fallen (old ones) stood erect on low leaves of the forest floor, having stuck in, or passed through, them. They stuck up as a fork which falls from the table. Yet you would not think that they fell with sufficient force.

The fruit of the sweet-gale is yellowing.

Aug. 29. I hear in the street this morning a goldfinch sing part of a sweet strain.

It is so cool a morning that for the first time I move into the entry to sit in the sun. But in this cooler weather I feel as if the fruit of my summer were hardening and maturing a little, acquiring color and flavor like the corn and other fruits in the field. When the very earliest ripe grapes begin to be scented in the cool nights, then, too, the first cooler airs of autumn begin to waft my sweetness on the desert airs of summer. Now, too, poets nib their pens afresh. I scent their first-fruits in the cool evening air of the year. By the coolness the experience of the summer is condensed and matured, whether our fruits be pumpkins or grapes. Man, too, ripens with the grapes and apples.

I find that the water-bugs (*Gyrinus*) keep amid the pads in open spaces along the sides of the river all day, and, at dark only, spread thence all over the river and gyrate rapidly. For food I see them eating or sucking at the wings and bodies of dead devil's-needles which fall on the water, making them too gyrate in a singular manner. If one gets any such food, the others pursue him for it.

There was a remarkable red aurora all over the sky last night.

P. M. — To Easterbrooks Country.

The vernonia is one of the most conspicuous flowers now where it grows, — a very rich color. It is somewhat past its prime; perhaps about with the red eupatorium. *Botrychium lunarioides* now shows its fertile frond above the shorn stubble in low grounds, but not shedding pollen. See the two-leaved Solomon's-seal berries, many of them ripe; also some ripe mitchella

berries, contrasting with their very fresh green leaves. White cohush berries, apparently in prime, and the arum fruit. The now drier and browner (purplish-brown) looking rabbit's clover, whose heads collected would make a soft bed, is an important feature in the landscape; pussies some call them; more puffed up than before. The thorn bushes are most sere and yellowish-brown bushes now.

I see more snakes of late, methinks, both striped and the small green.

The slate-colored spots or eyes — fungi — on several kinds of goldenrods are common now. The knife-shaped fruit of the ash has strewn the paths of late.

Aug. 30. P. M. — Up Assabet.

The river began to fall perhaps yesterday, after rising perhaps fourteen or fifteen inches. It is now about one foot higher than before the rain of the 25th. A rise of one foot only from low water gives an appearance of fullness to the stream, and though the meadows were dry before, it would now be difficult to work on them. The potamogetons, etc., are drowned, and you see a full rippling tide where was a sluggish and weedy stream but four or five days ago. Now, perhaps, will be the end of quite a number of plants which culminate in dry weather when the river is low, as some potamogetons, limnanthemum (in the river), etc. Sparganium and heart-leaf are washed up, and the first driftwood comes down; especially portions of bridges that have been repaired take their way slowly to the sea, if they are not saved by some thrifty boatman. The river is fuller,

with more current; a cooler wind blows; the reddish *Panicum agrostoides* stands cool along the banks; the great yellow flowers of the *Bidens chrysanthemoides* are drowned, and now I do not see to the bottom as I paddle along.

The pasture thistle, though past its prime, is quite common, and almost every flower (*i. e.* thistle), wherever you meet with it, has one or more bumblebees on it, clambering over its mass of florets. One such bee which I disturb has much ado before he can rise from the grass and get under weigh, as if he were too heavily laden, and at last he flies but low. Now that flowers are rarer, almost every one of whatever species has bees or butterflies upon it.

Now is the season of rank weeds, as *Polygonum Careyi*, tall rough goldenrod, *Ambrosia elatior*, primrose, erechthites (some of this seven feet high), *Bidens frondosa* (also five feet high). The erechthites down has begun to fly.

We start when we think we are handling a worm, and open our hands quickly, and this I think is designed rather for the protection of the worm than of ourselves.

Acorns are not fallen yet. Some haws are ripe.

The plants now decayed and decaying and withering are those early ones which grow in wet or shady places, as hellebore, skunk-cabbage, the two (and perhaps three) smilacinas, uvularias, polygonatum, medeola, *Senecio aureus* (except radical leaves), and many brakes and sarsaparillas, and how is it with trilliums [1] and arums? [2]

[1] Many fallen, Aug. 19, 1852.

[2] Trientalis and arums are decayed and decaying.

The prevailing flowers, considering both conspicuousness and numbers, at present time, as I think now:[1] —

Solidagos, especially large three-ribbed, *nemoralis*, tall rough, etc.
Asters, especially *Tradescanti*, *puniceus*, *corymbosus*, *dumosus*, *Diplopappus umbellatus*
Tansy
Helianthuses, as *Helianthus decapetalus*, *divaricatus*, *annuus*, etc.
Eupatoriums, as *perfoliatum*, *purpureum*
Mikania
Polygonums, as *P. Careyi*, *dumetorum*, front-rank, *Persicaria*, *sagittatum*, etc.
Gnaphalium, as *polycephalum* and pearly
Bidens, as *frondosa* and *chrysanthemoides*
Gerardias, as *purpurea* and *pediculata*
Hieraciums, as *Canadense*, *scabra*, and *paniculatum*
Vernonia
Polygala sanguinea, etc.
Liatris
Nabalus albus
Mints, as lycopuses, white mint, pycnanthemums
Hypericums, the small ones of all kinds
Leontodon autumnalis (prevailing, open in forenoon)
Pontederia
Sagittaria variabilis
Desmodiums
Spiranthes cernua
Lespedeza violacea
Cuscuta
Rhexia
Lobelia cardinalis
Cirsium pumilum
Chenopodiums
Scutellaria lateriflora
Impatiens
Apios
Linaria vulgaris
Gratiola aurea

[1] Imperfect list.

Aug. 31. P. M. — To Fair Haven Hill.

Was caught in five successive showers, and took refuge in Hayden's barn, under the cliffs, and under a tree. A thunder-cloud, seen from a hilltop, as it is advancing rapidly across the sky on one side, whose rear at least will soon strike us. The dark-blue mass (seen edgewise) with its lighter upper surface and its copious curving rain beneath and behind, like an immense steamer holding its steady way to its port, with tremendous mutterings from time to time, a rush of cooler air, and hurried flight of birds.

These later weeds, — chenopodiums, Roman wormwood, amaranth, etc., — now so rank and prevalent in the cultivated fields which were long since deserted by the hoers, now that the potatoes are for the most part ripened, are preparing a crop for the small birds of the fall and winter, those pensioners on civilization. These weeds require cultivated ground, and Nature perseveres each year till she succeeds in producing a bountiful harvest by their seeds, in spite of our early assiduity. Now that the potatoes are cared for, Nature is preparing a crop of chenopodium and Roman wormwood for the birds.

Now especially the crickets are seen and heard on dry and sandy banks and fields, near their burrows, and some hanging, back down, to the stems of grass, feeding. I entered a dry grassy hollow where the cricket alone seemed to reign, — open like a bowl to the sky.

While I stand under a pine for shelter during the rain, on Fair Haven Hill-side, I see many sarsaparilla plants fallen and withering green, *i. e.* before changing. It is

as if they had a weak hold on the earth, on the subterranean stocks.

The nightshade berries are handsome, not only for their clear red, but the beautifully regular form of their drooping clusters, suggesting a hexagonal arrangement for economy of room.

There was another shower in the night (at 9 P. M.), making the sixth after 1.30 P. M. It was evidently one cloud thus broken into six parts, with some broad intervals of clear sky and fair weather. It would have been convenient for us, if it had been printed on the first cloud, "Five more to come!" Such a shower has a history which has never been written. One would like to know how and where the cloud first gathered, what lands and water it passed over and watered, and where and when it ceased to rain and was finally dissipated.

VII

SEPTEMBER, 1859

(ÆT. 42)

Sept. 1. P. M. — To Saw Mill Brook and Flint's Pond.

That reach in the road this side Britton's Camp might be called Nabalus Road, they are so abundant there. Some of them are fully six feet high, — a singularly tall and slender plant.

See, I think, my first tobacco-pipe this afternoon, now that they are about done, and have seen no pine-sap this year, abundant as both the above were last year. Like fungi, these plants are apparently scarce in a dry year, so that you might at first think them rare plants. This is a phenomenon of drought.

I see in different places small grubs splitting leaves now, and so marking them curiously with light brown or whitish on the green. Here are two at work in a *Rhus Toxicodendron* leaf. They appear to have been hatched within the leaf at the apex, and each has eaten upward on its own side of the midrib and equally fast, making a light-colored figure shaped like a column of smoke in the midst of the green. They perfectly split the leaf, making no visible puncture in it, even at the ribs or veins. Some creatures are so minute that they find food enough for them between the two sides of a thin leaf, without injuring the cuticle. The ox requires

the meadows to be shorn for him, and cronches both blade and stalk, even of the coarsest grass, as corn; but these grubs do their browsing in narrower pastures, pastures not so wide as their own jaws, between fences (inviolable to them) of their own establishing, or along narrow lanes. There, secure from birds, they mine, and no harm can they do now that the green leaf has so commonly done its office.

If you would study the birds now, go where their food is, *i. e.* the berries, especially to the wild black cherries, elder-berries, poke berries, mountain-ash berries, and ere long the barberries, and for pigeons the acorns. In the sprout-land behind Britton's Camp, I came to a small black cherry full of fruit, and then, for the first time for a long while, I see and hear cherry-birds — their shrill and fine seringo — and the note of robins, which of late are scarce. We sit near the tree and listen to the now unusual sounds of these birds, and from time to time one or two come dashing from out the sky toward this tree, till, seeing us, they whirl, disappointed, and perhaps alight on some neighboring twigs and wait till we are gone. The cherry-birds and robins seem to know the locality of every wild cherry in the town. You are as sure to find them on them now, as bees and butterflies on the thistles. If we stay long, they go off with a fling, to some other cherry tree, which they know of but we do not. The neighborhood of a wild cherry full of fruit is now, for the notes of birds, a little spring come back again, and when, a mile or two from this, I was plucking a basketful of elder-berries (for which it was rather early yet), there too, to my surprise,

I came on a flock of golden robins and of bluebirds, apparently feeding on them. Excepting the vacciniums, now past prime and drying up, the cherries and elder-berries are the two prevailing fruits now. We had remarked on the general scarcity and silence of the birds, but when we came to the localities of these fruits, there again we found the berry-eating birds assembled, — young (?) orioles and bluebirds at the elder-berries.

Green white pine cones are thrown down. An unusual quantity of these have been stripped for some time past, and I see the ground about the bases of the trees strewn with them.

The spikenard berries in the shade at Saw Mill have but just begun to turn. The *Polygonatum biflorum* with its row of bluish-green berries (the blue a bloom), pendulous from the axils of the recurved stem, apparently now in its prime. Red choke-berry ripe. Smooth sumach probably hardly ripe yet generally.

The fruit of the arum is the most remarkable that I see this afternoon, such its brilliancy, color, and form; perhaps in prime now. It is among the most easily detected now on the floor of the swamp, its bright-scarlet cone above the fallen and withered leaves and amid its own brown or whitish and withering leaves. Its own leaves and stem perhaps soft and decaying, while it is perfectly fresh and dazzling. It has the brightest gloss of any fruit I remember, and this makes the green ones about as remarkable as the scarlet. With, perchance, a part of the withered spathe still investing and veiling it. The scarlet fruit of the arum spots the swamp floor.

Now, also, bright-colored fungi of various colors on the swamp floor begin to compete with these fruits. I see a green one.

The elder-berry cyme, held erect, is of very regular form, four principal divisions drooping toward each quarter around an upright central one. Are said to make a good dye. They fill your basket quickly, the cymes are so large and lie up so light.

The autumnal dandelion is a prevailing flower now, but since it shuts up in the afternoon it might not be known as common unless you were out in the morning or in a dark afternoon. Now, at 11 A. M., it makes quite a show, yet at 2 P. M. I do not notice it.

Bought a pair of shoes the other day, and, observing that as usual they were only wooden-pegged at the toes, I required the seller to put in an extra row of iron pegs there while I waited for them. So he called to his boy to bring those zinc pegs, but I insisted on iron pegs and no zinc ones. He gave me considerable advice on the subject of shoes, but I suggested that even the wearer of shoes, of whom I was one, had an opportunity to learn some of their qualities. I have learned to respect my own opinion in this matter. As I do not use blacking and the seller often throws in a box of blacking when I buy a pair of shoes, they accumulate on my hands.

Saw this afternoon, on a leaf in the Saw Mill wood-path, a very brilliant beetle a quarter or a third of an inch in length with brilliant green and copper reflections.[1] The same surface, or any part of the upper surface, of the bug was green from one point of view

[1] *Vide* June 28th, 1860.

and burnished copper from another. Yet there was nothing in its form to recommend this bug.

You must be careful not to eat too many nuts. I one winter met a young man whose face was broken out into large pimples and sores, and when I inquired what was the matter, he answered that he and his wife were fond of shagbarks, and therefore he had bought a bushel of them, and they spent their winter evenings eating them, and this was the consequence.

Sept. 2. P. M. — To Ledum Swamp.

The pontederia leaves are now decidedly brown or brownish, and this may be the effect of frost, since we have had some considerable in low places. Perhaps they occupy particularly cold places.

The farmer is obliged to hide his melon-patch in the midst of his corn or potatoes, far away. I sometimes stumble on it as I am going across lots. I see one to-day where the watermelons are intermixed with carrots in a carrot-bed, and so concealed by the general resemblance of leaf, etc., at a little distance.

Going along Clamshell Hill, I look over the meadows. Now, after the first rain raising the river, the first assault on the summer's sluggishness, the air is of late cooler and clearer, autumnal, and the meadows and low grounds, which, of course, have been shorn, acquire a fresh yellowish green as in the spring. This is another phase of the second spring, of which the peeping of hylas by and by is another.[1]

[1] One reason for this in some even dry fields is owing to the cyperuses — which are yellow and low and late — being revealed by cutting the grass and still growing.

I once did some surveying for a man who remarked, *but not till the job was done*, that he did not know when he should pay me. I did not pay much heed to this, though it was unusual, supposing that he meant to pay me some time or other. But after a while he sent to me a quart of red huckleberries, and this I thought was ominous and he distinguished me altogether too much by this gift, since I was not his particular friend. I saw it was the first installment, which would go a great way toward being the last. In course of years he paid a part of the debt in money, and that is the last I have heard of it.

The sarothra grows thickly, and is now abundantly in bloom, on denuded places, *i. e.*, where the sod and more or less soil has been removed, by sandy roadsides.

At Ledum Swamp the frosts have now touched the *Polygonum Careyi* pretty extensively, the leaves and stem, leaving the red spikes; also some erechthites and poke and the tenderest high blueberry shoots, their tips (from where the bushes were cut down). But the *Woodwardia Virginica* is not touched. (*Vide* back, August 23d.)

Poke berries begin at Corner Spring.

Sept. 3. A strong wind, which blows down much fruit. R. W. E. sits surrounded by choice windfall pears.

Sept. 4. P. M. — To Well Meadow and Walden.

The purple culms and spikes of the crab-grass or finger-grass, spreading and often almost prostrate

under our feet in sandy paths and causeways, are where the purple cuticle of the earth again shows itself, and we seem to be treading in our vintage whether we will or not. Earth has donned the purple. When, walking over some dry field (some time since), I looked down and saw the yellowish tuft of the *Fimbristylis capillaris*, with its spreading inverted cone of capillary culms, like the upper half of an hour-glass, but still more, when, pacing over the sandy railroad causeway, I look down and find myself treading on the purple culms of the crab-grass, I am reminded of the maturity of the year. We have now experienced the full effects of heat such as we have in this latitude. The earth itself appears to me as a ripe purple fruit, — though somewhat dusty here, — and I may have rubbed the bloom off with my feet. But if Bacchus can ever stand our climate, this must be his season.

Topping the corn, which has been going on some days, now reveals the yellow and yellowing pumpkins. This is a genuine New England scene. The earth blazes not only with sun-flowers but with sun-fruits.

The four-leaved loosestrife, which is pretty generally withering and withered, seems to have dried up, — to suffer peculiarly from the annual drought, — perhaps both on account of its tenuity and the sandiness or dryness of its locality.

The *Lycopodium complanatum* sheds pollen [*sic*].

Where are the robins and red-wing blackbirds of late? I see no flocks of them; not *one* of the latter, and only a few solitary robins about wild cherry trees, etc.

A few yew berries, but they appear (?) to be drying

up. The most wax-like and artificial and surprising of our wild berries, — as surprising as to find currants on hemlocks.

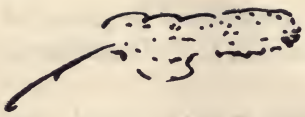
In the Well Meadow Swamp, many apparent *Aster miser*, yet never inclining to red there (in the leaf) and sometimes with larger flowers (five eighths of an inch [in] diameter) and slenderer cauline leaves than common, out apparently almost as long as *miser* elsewhere.

The swamp thistle (*Cirsium muticum*) is apparently in its prime. One or two on each has faded, but many more are to come. Some are six feet high and have radical leaves nearly two feet long. Even these in the shade have humblebees on them.

You see small flocks of ducks, probably wood ducks, in the smaller woodland ponds now and for a week, as I at Andromeda Ponds, and can get nearer to them than in the spring.

The *Cornus sericea* and *C. paniculata* are rather peculiar for turning to a dull purple on the advent of cooler weather and frosts, in the latter part of August and first part of September. The latter, which grows at the bottom of our frostiest hollows, turns a particularly clear dark purple, an effect plainly attributable to frost. I see it this afternoon in the dry, deep hollow just west of the middle Andromeda Pond.

I think I see two kinds of three-ribbed goldenrod (beside *Canadensis*), both being commonly smooth-stemmed below and downy above, but one has very fine or small rays as compared with the other. They appear to be both equally common now. The fine-rayed at Sedge Path.



See a very large mass of spikenard berries fairly ripening, eighteen inches long.

Three kinds of thistles are commonly out now, — the pasture, lanceolate, and swamp, — and on them all you are pretty sure to see one or two humblebees. They become more prominent and interesting in the scarcity of purple flowers. (On many you see also the splendid goldfinch, yellow and black (?) like the humblebee.) The thistles beloved of humblebees and goldfinches.

Three or four plants are peculiar now for bearing plentifully their fruit in drooping cymes, *viz.* the elderberry and the silky cornel and the *Viburnum Lentago* and *Solanum Dulcamara*. The other cornels do not generally come to droop before they lose their fruit. Nor do the viburnums droop much. The fruit of the *Cornus sericea* is particularly interesting to me, and not too profuse, — small cymes of various tints half concealed amid the leaves.

Sept. 5. Spent a part of the forenoon in the woods in the northwest part of Acton, searching for a stone suitable for a millstone for my lead-mill.

Sept. 6. Hear the sounds nowadays — the lowing, tramp, and calls of the drivers — of cows coming down from up-country.

Staghorn sumach berries probably some time, but ours are injured by worms. The fever-bush leaves

are remarkably round and entire yet, as if by their odor defended from insects.[1]

The feverwort berries are apparently nearly in their prime, of a clear "corn yellow" and as large as a small cranberry, in whorls at the axils of the leaves of the half-prostrate plants.

I hear occasionally a half-warbled strain from a warbling vireo in the elm-tops, as I go down the street nowadays. There is about as much life in their notes now as in the enfeebled and yellowing elm tree leaves at present.

The liatris is, perhaps, a little past prime. It is a very rich purple in favorable lights and makes a great show where it grows. Any one to whom it is new will be surprised to learn that it is a wild plant. For prevalence and effect it may be put with the vernonia, and it has a general resemblance to thistles and knapweed, but is a handsomer plant than any of them.

Sept. 8. The 7th, 8th, and 9th, the State muster is held here. The only observation I have to make is that [Concord] is fuller of dust and more uninhabitable than I ever knew it to be before. Not only the walls, fences, and houses are thickly covered with dust, but the fields and meadows and bushes; and the pads in the river for half a mile from the village are white with it. From a mile or two distant you see a cloud of dust over the town and extending thence to the muster-field. I went to the store the other day to buy a bolt for our front door, for, as I told the storekeeper, the Governor

[1] It is eaten or cut by them. *Vide* Sept. 4th, 1856.

was coming here. "Aye," said he, "and the Legislature too." "Then I will take two bolts," said I. He said that there had been a steady demand for bolts and locks of late, for our protectors were coming. The surface of the roads for three to six inches in depth is a light and dry powder like ashes.

P. M. — To Fair Haven Pond.

Grapes are turning purple, but are not ripe.

I see the black head and neck of a little dipper in midstream, a few rods before my boat. It disappears, and though I search carefully, I cannot detect it again. It is undoubtedly hidden mid the weeds — pads, flags, and pontederia, etc. — along the shore. Ducks more common.

Sept. 9. I start many pigeons now in a sprout-land.

I have noticed for a week or more some swarms of light-colored and very small fuzzy gnats in the air, yet not in such concentrated swarms as I shall see by and by.

Now for hazelnuts, — where the squirrels have not got them.

Within a week I think I have heard screech owls at evening from over the river once or twice.

Sept. 10. See wasps, collected in the sun on a wall, at 9 A. M.

Sept. 11. P. M. — To Conantum-end.

The prinos berries are now seen, red (or scarlet), clustered along the stems, amid the as yet green leaves. A cool red.

By the pool in Hubbard's Grove, I see tall tupelos, all dotted with the now ripe (apparently in prime) small oval purple berries, two or three together on the end of slender peduncles, amid the reddening leaves. This fruit is very acid and has a large stone, but I see several robins on the trees, which appear to have been attracted by it. Neither tree nor fruit is generally known, and many liken the former when small to a pear. The trees are quite full of fruit.

The wax-like fruit of *Cornus paniculata* still holds on abundantly.

This being a cloudy and somewhat rainy day, the autumnal dandelion is open in the afternoon.

The *Rhus Toxicodendron* berries are now ripe and greenish-yellow, and some already shrivelled, over bare rocks.

September is the month when various small, and commonly inedible, berries in cymes and clusters hang over the roadsides and along the walls and fences, or spot the forest floor. The clusters of the *Viburnum Lentago* berries, now in their prime, are exceedingly and peculiarly handsome, and edible withal. These are drooping, like the *Cornus sericea* cymes. Each berry in the cyme is now a fine, clear red on the exposed side and a distinct and clear green on the opposite side. Many are already purple, and they turn in your hat, but they are handsomest when thus red and green.

The large clusters of the *Smilacina racemosa* berries, four or five inches long, of whitish berries a little smaller than a pea, finely marked and dotted with vermilion

or bright red, are very conspicuous. I do not chance to see any ripe.

No fruit is handsomer than the acorn. I see but few fallen yet, and they are all wormy. Very pretty, especially, are the white oak acorns, three raying from one centre.

I see dill and saffron still, commonly out at R. W. E.'s.

Sept. 12. P. M. — To Moore's Swamp and Great Fields.

Elder-berries are apparently in prime, generally black, though many have been plucked by birds.

The four kinds of bidens (*frondosa*, *connata*, *cernua*, and *chrysanthemoides*) abound now, but much of the *Beckii* was drowned by the rise of the river. Omitting this, the first two are inconspicuous flowers, cheap and ineffectual, commonly without petals, like the erechthites, but the third and fourth are conspicuous and interesting, expressing by their brilliant yellow the ripeness of the low grounds.

Most of the late flowers are already associated in my mind with cooler and clearer, flashing weather, as the witch-hazel, the gentians, the *Bidens cernua*, *Spiranthes cernua*, *Polygonum amphibium* and *hydropiperoides* in its prime, and the *Polygala sanguinea*, still prevalent.

I stand in Moore's Swamp and look at Garfield's dry bank, now before the woods generally are changed at all. How ruddy ripe that dry hillside by the swamp, covered with goldenrods and clumps of hazel bushes here and there, now more or less scarlet. The golden-

rods on the top and the slope of the hill are the *Solidago nemoralis*, at the base the taller *S. altissima*. The whole hillside is perfectly dry and ripe.

Many a dry field now, like that of Sted Buttrick's on the Great Fields, is one dense mass of the bright-golden recurved wands of the *Solidago nemoralis* (a little past prime), waving in the wind and turning upward to the light hundreds, if not a thousand, flowerets each. It is the greatest mass of conspicuous flowers in the year, and uniformly from one to two feet high, just rising above the withered grass all over the largest fields, now when pumpkins and other yellow fruits begin to gleam, now before the woods are noticeably changed. Some field where the grass was too thin and wiry to pay for cutting, with great purplish tufts of *Andropogon furcatus*, going to seed, interspersed. Such a mass of yellow for this field's last crop! Who that had botanized here in the previous month could have foretold this more profuse and teeming crop? All ringing, as do the low grounds, with the shrilling of crickets and locusts and frequented by honey-bees (*i. e.* the goldenrod *nemoralis*). The whole field turns to yellow, as the cuticle of a ripe fruit. This is the season when the prevalence of the goldenrods gives such a ripe and teeming look to the dry fields and to the swamps. They are now (the *arguta* being about done) the *nemoralis* and *altissima*, both a little past prime. The *S. nemoralis* spreads its legions over the dry plains now, as soldiers muster in the fall. It is a muster of all its forces, which I review, eclipsing all other similar shows of the year. Fruit of August and September,

sprung from the sun-dust. The fields and hills appear in their yellow uniform. There are certain fields so full of them that they might give their name to the town or region, as one place in England is called Saffron Walden. Perhaps the general prevalence of yellow is greater now when many individual plants are past prime.

I notice in Moore's Swamp that though the potato vines were killed long since, few if any weeds are. They survive to perpetuate their race, until severer frosts come.

The beach plums are about ripe; the black cherries nearly gone.

I start a flock of five turtle doves from the dry Great Fields, near buckwheat. They go off with a whistling note.

A profusion of wild fruits, agreeable to the eye if not palate, is seen along some walls and hedges now. Take this dry wall-side by Sted Buttrick's field now, though probably not remarkably rich. Here I find elder-berries, panicled cornel, acorns of various kinds, black cherry (nearly gone), green-briar berries, grapes, hazelnuts (the pale-brown nuts now peeping between the husks), alternate cornel (which is about done), sumach, chokeberry, and haws; and earlier there were shad-berries, thimble-berries, and various kinds of huckle- and blackberries, etc. Some shrub oak acorn cups are empty, but they have not many fallen. Large yellowish caterpillars, heaped on the leaves, have so stripped some shrub oaks as to expose and reveal the acorns.

The other day a tender-hearted man came to the depot and informed Neighbor Wild that there was a

Maltese cat caught in a steel trap near the depot, which perhaps was his. Wild thought it must be his or "Min Thoreau." She had tried to jump over a fence with the trap on her leg, but had lodged one side while the trap hung the other. The man could not stand to open the trap, the cat scratched so, but at length he threw the trap over, and so the cat went home, dragging it to Wild's (for it was his cat), and the man advised him to keep the trap to pay the one who set it for his inhumanity. I suspect, however, that the cat had wandered off to Swamp Bridge Brook and there trod in a trap set for mink or the like. It is a wonder it does not happen oftener.

I saw a star-nosed mole dead in the path on Conantum yesterday, with no obvious wound.

Sept. 13. P. M. — Up Assabet.

The *Bidens chrysanthemoides*, now apparently in its prime by the river, now almost dazzles you with its great sunny disk. I feast my eyes on it annually. It grows but sparingly near the village, but those few never fail to make their appearance at last. The yellow lily's is a cool yellow in comparison, but in this is seen the concentrated heat of autumn.

Now, while other fruits are ripe or ripening, I see the great peduncle of the peltandra, eighteen or twenty-four inches long, curving downward, with its globular mass of green fruit, often two inches in diameter, at the end, looking like slung shot. This mass of viscid seeds or nuts must be the food of many creatures. Also the pontederia spike is now generally turned downward

beneath the water and increased in size, though some have flowers still at their tips. So, too, probably (for I do not see them) the yellow and white lilies are ripening their seeds in the water and mud beneath the surface.[1]

The bloom and freshness of the river was gone as soon as the pickerel-weed began to be imbrowned, in the latter part of August. It is fall and harvest there now.

I remember my earliest going a-graping. (It was a wonder that we ever hit upon the ripe season.) There was more fun in finding and eying the big purple clusters high on the trees and climbing to them than in eating them. We used to take care not to chew the skins long lest they should make our mouths sore.

Some haws of the scarlet thorn are really a splendid fruit to look at now and far from inedible. They are not only large, but their beauty is enhanced by the persistent calyx relieving the clear scarlet of the fruit.

There are various degrees of living out-of-doors. You must be outdoors long, early and late, and travel far and earnestly, in order to perceive the phenomena of the day. Even then much will escape you. Few live so far outdoors as to hear the first geese go over.

I see some shrub oak acorns turned dark on the bushes and showing their meridian lines, but generally acorns of all kinds are green yet. The great red oak acorns have not fallen. It is a wonder how pigeons can swallow acorns whole, but they do.

Many hemlock leaves which had prematurely ripened and withered in the dry weather have fallen in

[1] Yes, I see them, — the former urn-shaped. *Vide* 14th.

the late winds and washed up along the side of the river, — already red there.

Sept. 14. High, gusty winds, with dust and a little rain (more or less for two or three days).

These powerful gusts fill all the air with dust, concealing the earth and sky.

P. M. — To Cliffs *via* Hubbard's Bath.

The *Spiranthes cernua* has a sweet scent like the clethra's.

The mountain sumach appears to bear quite sparingly. Its berries are a hoary crimson and not bright like those of the smooth. Also they are in looser masses. They are, *perhaps*, a little later, but I think ripe now.

I see in the swamp under the Cliffs the dark, decaying leaves of the skunk-cabbage, four or five spreading every way and so flat and decayed as to look like a fungus or mildew, making it doubtful at first what plant it is; but there is the sharp green bud already revealed in the centre between the leaf-stalks, ready to expand in the spring.

This wind has strewn the Fair Haven Hill-side with apples. I think that fully three quarters of all are on the ground. Many trees are almost entirely stripped, the whole crop lying in a circular form beneath, yet hard and green. Others on the hillside have rolled far down. The farmers will be busy for some time gathering these windfalls. The winds have come to shake the apple trees prematurely, making fruit (for pies) cheap, I trust, against Thanksgiving or Cattle-Show.[1] Not

[1] [*Excursions*, p. 296; Riv. 364.]

only apples and other fruit, but a great many green as well as withered leaves, strew the ground under almost all kinds of trees.

I notice of late the green or ripe pods of the *Orchidaceæ*, — some for a long time, — including gymnodenia, lady's-slipper, etc.; pods full of a fine, dust-like seed. The dusty-seeded *Orchidaceæ*.

The yellow lily (*Nuphar advena*) fruit, now green and purplish, is ripening under water, of this form and size: full of yellow seeds: The white lily, when stripped of the blackened and decaying petals, etc., is of this form:

Even the tough-twigged mocker-nut, yet green, is blown off in some places. I bring home a twig with three of its great nuts together, as big as small apples, and children follow and eye them, not knowing what kind of fruit it is.

Like the fruits, when cooler weather and frosts arrive, we too are braced and ripened. When we shift from the shady to the sunny side of the house, and sit there in an extra coat for warmth, our green and leafy and pulpy thoughts acquire color and flavor, and perchance a sweet nuttiness at last, worth your cracking. Now all things suggest fruit and the harvest, and flowers look *late*, and for some time the sound of the flail has been heard in the barns.

They are catching pigeons nowadays. Coombs has a stand west of Nut Meadow, and he says that he has

just shot fourteen hawks there, which were after the pigeons. I have one which he has shot within a day or two and calls a pigeon hawk. It is about twenty inches in alar extent. Above dark-slate or brownish with the edges, *i. e.* tips, of the feathers (especially of wing-coverts) rufous. The primaries and secondaries dark or blackish brown, barred with black, and only a [*sic*] some white concealed on the inner vanes near the base. Wings beneath white or whitish, thickly barred with dark. Scapulars with white spots. Head much mutilated, but no "black spots" visible, but apparently the dark brown mixed or edged with rufous. Cere, etc., said to have been green. Beneath brownish-white, centred with brown, with a darker line through that. Femorals still more rustyish brown, with central dashes. Legs yellowish. Tail slate, with four black bars half an inch or more wide; the edge slate, with a very narrow edging of white; beneath the slate is almost white.

What kind of hawk is this? I can learn nothing from Wilson and Nuttall. The latter thinks that neither the pigeon nor sparrow hawk is found here!![1]

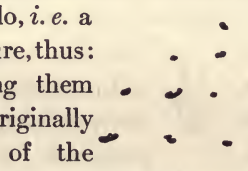
Sept. 15. Yesterday was very cold, with northwest wind, and this morning the first frost in the garden, killing some of our vines.

W. Ricketson says that, when looking for insects this morning under the loose bark of an apple tree on Nawshawtuct, he found a bat hanging there which measured eleven feet [*sic*], alar extent.

[1] Dr. Kneeland, to whom I showed the tail and wings, thought it a pigeon hawk.

P. M. — To Annursnack.

Dense flocks of pigeons hurry-skurry over the hill. Pass near Brooks's pigeon-stands. There was a flock perched on his poles, and they sat so still and in such regular order there, being also the color of the wood, that I thought they were wooden figures at first. They were perched not only in horizontal straight lines one above the other, which the cross-bars required, but at equal distances apart on these perches, which must be their own habit; and it struck me that they made just such a figure seen against the sky as pigeonholes cut in a doves' house do, *i. e.* a more or less triangular figure, thus: and possibly the seeing them thus perched might have originally suggested this arrangement of the holes.



Pigeons dart by on every side, — a dry slate color, like weather-stained wood (the weather-stained birds), fit color for this aerial traveller, a more subdued and earthy blue than the sky, as its field (or path) is between the sky and the earth, — not black or brown, as is the earth, but a terrene or slaty blue, suggesting their aerial resorts and habits.

The Emersons tell me that their Irishman, James, held his thumb for the calf to suck, after dipping it in a pitcher of milk, but, the milk not coming fast enough, [the calf] butted (or bunted) the pitcher to make the milk come down, and broke it.

The grain of the wild rice is all green yet.

I find that Temple raises his own tobacco. The great leaves were spread over the bottom and sides of a hay-

rigging in his barn, by the open door, to dry. He smokes them. He says that the season is rather short for it here, but I saw some still growing and in bloom abundantly. What kind is it? "Cuby, they call it." He smokes it and thinks it better than any he can buy.

Sept. 16. Another and severer frost, which cut off all our vines, etc., lespedeza, corn, etc.

P. M. — By the roadside, forty or fifty rods east of the South Acton station, I find the *Aster Novæ-Angliæ*, apparently past prime. I must call it a plant of this vicinity, then. I thought it "in prime or a little past" at Salem, September 21, 1858. I will venture to put it with the *A. puniceus*.

Young Nealy says that there are blue-winged teal about now. Others are out after ducks. Nealy says he shot the first golden plover he has seen, this morning.[1]

How unpromising are promising men! Hardly any disgust me so much. I have no faith in them. They make gratuitous promises, and they break them gratuitously.

When an Irishwoman tells me that she would n't tell a lie for her life (because I appear to doubt her), it seems to me that she has already told a lie. She holds herself and the truth very cheap to say that so easily.

What troubles men lay up for want of a little energy and precision! A man who steps quickly to his mark leaves a great deal of filth behind. There's many a well-meaning fellow who thinks he has a hard time of it who will not put his shoulder to the wheel, being spell-

[1] Does he know it??

bound, — who sits about, as if he were hatching his good intentions, and every now and then his friends get up a subscription for him, and he is cursed with the praise of being "a clever fellow." It would really be worth his while to go straight to his master the devil, if he would only shake him up when he got there. Men who have not learned the value of time, or of anything else; for whom an infant school and a birchen rod is still and forever necessary. A man who is not prompt affects me as a creature covered with slime, crawling through mud and lying dormant a great part of the year. Think of the numbers — men and women — who want and *will* have and *do* have (how do they get it?!) what they will not earn! The non-producers. How many of these bloodsuckers there are fastened to every helpful man or woman in this world! They constitute this world. It is a world full of snivelling prayers, — whose very religion is a prayer! As if beggars were admirable, were respectable, to anybody!

Again and again I am surprised to observe what an interval there is, in what is called civilized life, between the shell and the inhabitant of the shell, — what a disproportion there is between the life of man and his conveniences and luxuries. The house is neatly painted, has many apartments. You are shown into the sitting-room, where is a carpet and couch and mirror and splendidly bound Bible, daguerreotypes, ambrotypes, photographs of the whole family even, on the mantelpiece. One could live here more deliciously and improve his divine gifts better than in a cave surely. In the bright and costly saloon man will not be starv-

ing or freezing or contending with vermin surely, but he will be meditating a divine song or a heroic deed, or perfuming the atmosphere by the very breath of his natural and healthy existence. As the parlor is preferable to the cave, so will the life of its occupant be more godlike than that of the dweller in the cave. I called at such a house this afternoon, the house of one who in Europe would be called an operative. The woman was not in the third heavens, but in the third kitchen, as near the wood-shed or to outdoors and to the cave as she could instinctively get, for there she belonged, — a coarse scullion or wench, not one whit superior, but in fact inferior, to the squaw in a wigwam, — and the master of the house, where was he? He was drunk somewhere, on some mow or behind some stack, and I could not see him. He had been having a spree. If he had been as sober as he may be to-morrow, it would have been essentially the same; for refinement is not in him, it is only in his house, — in the appliances which he did not invent. So is it in the Fifth Avenue and all over the civilized world. There is nothing but confusion in our New England life. The hogs are in the parlor. This man and his wife — and how many like them! — should have sucked their claws in some hole in a rock, or lurked like gypsies in the outbuildings of some diviner race. They 've got into the wrong boxes; they rained down into these houses by mistake, as it is said to rain toads sometimes. They wear these advantages helter-skelter and without appreciating them, or to satisfy a vulgar taste, just as savages wear the dress of civilized men, just as that Indian chief

walked the streets of New Orleans clad in nothing but a gaudy military coat which his Great Father had given him. Some philanthropists trust that the houses will civilize the inhabitants at last. The mass of men, just like savages, strive always after the outside, the clothes and finery of civilized life, the blue beads and tinsel and centre-tables. It is a wonder that any load ever gets moved, men are so prone to put the cart before the horse.

We do everything according to the fashion, just as the Flatheads flatten the heads of their children. We conform ourselves in a myriad ways and with infinite pains to the fashions of our time. We mourn for our lost relatives according to fashion, and as some nations hire professed mourners to howl, so we hire stone-masons to hammer and blast by the month and so express our grief. Or if a public character dies, we get up a regular wake with eating and drinking till midnight.

Grasshoppers have been very abundant in dry fields for two or three weeks. Sophia walked through the Depot Field a fortnight ago, and when she got home picked fifty or sixty from her skirts, — for she wore hoops and crinoline. Would not this be a good way to clear a field of them, — to send a bevy of fashionably dressed ladies across a field and leave them to clean their skirts when they get home? It would supplant anything at the patent office, and the motive power is cheap.

I am invited to take some party of ladies or gentlemen on an excursion, — to walk or sail, or the like, — but by all kinds of evasions I omit it, and am thought to

be rude and unaccommodating therefore. They do not consider that the wood-path and the boat are my studio, where I maintain a sacred solitude and cannot admit promiscuous company. I will see them occasionally in an evening or at the table, however. They do not think of taking a child away from its school to go a-huckleberrying with them. Why should not I, then, have my school and school hours to be respected? Ask me for a certain number of dollars if you will, but do not ask me for my afternoons.

Sept. 18. Considerable rain yesterday, raising the streams at last somewhat.

The frost of the 16th was very severe for the season, killing all our vines, and to-day I see the corn, much of which was not yet topped, all withered and white, and the lespedeza withered in the paths, etc., etc., grape-vines very generally, and the ground-nut.

P. M. — To Grape Cliff.

There is an abundant crop of cones on the white pines this year,[1] and they are now for the most part brown and open. They make a great show even sixty rods off. The tops of the high trees for six or ten feet downward are quite browned with them, hanging straight downward. It is worth the while to observe this evidence of fertility, even in the white pine, which commonly we do not regard as a fruit-bearing tree. It is worth a long walk to look from some favorable point over a pine forest whose tops are thus covered with the brown cones just opened, — from which the

[1] Not only here, but as far off as Worcester, I observe.

winged seeds have fallen or are ready to fall. It is really a rich and interesting sight. How little observed are the fruits which we do not use! How few attend to the ripening and dispersion of the pine seed!

From the observation of this year I should say that the fringed gentian opened before the witch-hazel, for though I know many more localities of the last than the first, I do not find the last out till to-day, and it cannot have been out but a day or two.

Grape-vines are cut off, *i. e.* the leaves, before they have generally turned, this year.

The witch-hazel fruit appears to be now opening. The double-fruited stone splits and reveals the two shining black oblong seeds. It has a peculiarly formed nut, in pretty clusters, clothed, as it were, in close-fitting buckskin, amid the now yellowing leaves.

I hear the *chewink* note now more than a month ago, and it sounds cool and solitary.

Rice, who walks with me, thinks that that fine early sedge grass would be a capital thing to stuff cushions and beds with, it is so tough. (In hollows in woods.)

See checkerberries not yet fully grown nor ripe, somewhat pear-shaped, and whitish at the blossom end. A bear-berry ripe.

One might at first expect that the earth would bear its best men within the tropics, where vegetation is most luxuriant and there is the most heat. But the temperate zone is found to be most favorable to the growth and ripening of men. This fruit attains to the finest flavor there. So, methinks, it is neither the stem nor blossom end of a fruit that is sweetest and maturest, but its

blossom cheek or temperate zone, the portion that lies under its temperate zone. I suspect that the south pole is the stem end of the globe and that Europe and America are on its rosy cheek, and fortunate are we who live in America, where the bloom is not yet rubbed off.

I have seen no *Viburnum nudum* berries for some time. They are considerably earlier than the *V. Lentago.*

Dr. Bartlett handed me a paper to-day, desiring me to subscribe for a statue to Horace Mann. I declined, and said that I thought a man ought not any more to take up room in the world after he was dead. We shall lose one advantage of a man's dying if we are to have a statue of him forthwith. This is probably meant to be an opposition statue to that of Webster. At this rate they will crowd the streets with them. A man will have to add a clause to his will, "No statue to be made of me." It is very offensive to my imagination to see the dying stiffen into statues at this rate. We should wait till their bones begin to crumble — and then avoid too near a likeness to the living.

See large flocks, apparently of chip-birds,[1] rise from the weeds in the garden, now after it clears up. Has the storm driven them from the north? Robins are eating the mountain-ash berries very fast. The robins are more seen than a fortnight ago.

Cistus, some gone to seed and open several days.

Sept. 19. A. M. — To Stow.

Hear the note of the goldfinch on all sides this fine day after the storm. Butternuts have been falling for two

[1] And Sept. 26th.

or three weeks, — now mostly fallen, — but must dry and lose their outer shells before cracking them.

They say that kittens' tails are brittle, and perhaps the tip of that one's was *broken* off.

The young gentleman who travels abroad learns to *pronounce*, and makes acquaintance with foreign lords and ladies, — among the rest perchance with Lord Ward, the inventor and probably consumer of the celebrated Worcestershire Sauce.

See many yellow butterflies in the road this very pleasant day after the rain of yesterday. One flutters across between the horse and the wagon safely enough, though it looks as if it would be run down.

Sept. 20. P. M. — To White Pond.

The button-bushes by the river are generally overrun with the mikania. This is married to the button-bush as much as the vine to the elm, and more. I suspect that the button-bushes and black willows have been as ripe as ever they get to be.

I get quite near to a blackbird on an apple tree, singing with the grackle note very earnestly and not minding me. He is all alone. Has a (rustyish) brown head and shoulders and the rest black. I think it is a grackle. Where are the red-wings now? I have not seen nor heard one for a long time. Is this a grackle come from its northern breeding-place?

Sept. 21. Heard in the night a snapping sound and the fall of some small body on the floor from time to time. In the morning I found that it was produced by

the witch-hazel nuts on my desk springing open and casting their seeds quite across the chamber, hard and stony as these nuts are.[1]

It is overcast, like yesterday, and yet more rain-promising.[2]

Methinks the 19th was such a day (the second after rain) as the 18th in '58, — a peculiarly fine September day, looking toward the fall, warm and bright, with yellow butterflies in the washed road, and early-changed maples and shrubs adorning the low grounds. The red nesæa blazing along the Assabet above the powder-mills. The apple crop, red and yellow, more conspicuous than ever amid the washed leaves.

The farmers on all sides are digging their potatoes, so prone to their work that they do not see me going across lots.

I sat near Coombs's pigeon-place by White Pond. The pigeons sat motionless on his bare perches, from time to time dropping down into the bed and uttering a *quivet* or two. Some stood on the perch; others squatted flat. I could see their dove-colored breasts. Then all at once, being alarmed, would take flight, but ere long return in straggling parties. He tells me that he has fifteen dozen baited, but does not intend to catch any more at present, or for two or three weeks, hoping to attract others. Rice says that white oak acorns pounded up, shells and all, make the best bait for them.

I see now in the wood-paths where small birds and

[1] For several days they are shooting their shining black seeds about my chamber. *Vide* [next page].

[2] Rains in afternoon and night.

partridges, etc., have been destroyed, — only their feathers left, — probably by hawks. Do they not take their prey often to a smooth path in the woods?

White Pond is being dimpled here and there all over, perhaps by fishes; and so is the river. It is an overcast day. Has that anything to do with it? I see some of the rainbow girdle reflected around its edge. Looking with the proper intention of the eye, I see it is ribbed with the dark prolonged reflections of the pines almost across. But why are they bent one side? Is it the effect of the wind?

We are having our dog-days now and of late, methinks, having had none to speak of in August; and now at last I see a few toadstools, — the election-cake (the yellowish, glazed over) and the taller, brighter-yellow above. Those shell-less slugs which eat apples eat these also.

Jays are more frequently heard of late, maybe because other birds are more silent.

Considerable many acorns are fallen (black oak chiefly) in the path under the south edge of Conant's Wood, this side of White Pond. Acorns have been falling very sparingly ever since September 1, but are mostly wormy. They are as interesting now on the shrub oak (green) as ever.

I suspect that it is not when the witch-hazel nut first gapes open that the seeds fly out, for I see many (if not most of them) open first with the seeds in them; but when I release a seed (it being still held by its base), it flies as I have said. I think that its slippery base is compressed by the unyielding shell, which at length expels

it, just as I can make one fly by pressing it and letting it slip from between my thumb and finger. It appears to fit close to the shell at its base, even after the shell gapes.

The ex-plenipotentiary refers in after[-dinner] speeches with complacency to the time he spent abroad and the various lords and distinguished men he met, as to a *deed done* and an ever-memorable occasion! Of what account are titles and offices and opportunities, if you do no memorable deed?

I perceive that a spike of arum berries which I gathered quite green September 1 is now turned completely scarlet, and though it has lain on my desk in a dry and warm chamber all the while, the berries are still perfectly plump and fresh (as well as glossy) to look at, — as much so as any.

The greater part [of], almost all, the mikania was killed by the frost of the 15th and 16th. Only that little which was protected by its position escaped and is still in bloom. And the button-bush too is generally browned above by the same cause. This has given a considerably brown look to the side of the river.

Saw bæomyces (lately opened, probably with the rain of the 17th) by roadside.

Yesterday was a still, overcast, rain-promising day, and I saw this morning (perhaps it was yesterday) the ground about the back door all marked with worm-piles. Had they not come out for water after the dry weather?

See a St. Domingo cuckoo (black-billed) still.

Sept. 22. A mizzling day, with less rain than yesterday, filling the streams.

As I went past the Hunt cellar, where Hosmer pulled down the old house in the spring, I thought I would see if any new or rare plants had sprung up in that place which had so long been covered from the light. I was surprised to find there *Urtica urens* (?), very fresh and in bloom, one to three feet high, with ovate deeply cut leaves, which I never saw before; also *Nicotiana*, probably *Tabacum* (not the wild one), in flower, and *Anethum graveolens* (?), or dill, also in flower. I had not seen either of the last two growing spontaneously in Concord before. It is remarkable that tobacco should have sprung up there. Could the seed have been preserved from a time when it was cultivated there?[1] Also the *Solanum nigrum*, which is rare in Concord, with many flowers and green fruit. The prevailing plants in and about this cellar were mallows, *Urtica urens*, rich-weed (very rank), catnep, *Chenopodium Botrys*, *Solanum nigrum*, chickweed, *Bidens frondosa*, etc.[2]

It is remarkable what a curse seems to attach to any place which has long been inhabited by man. Vermin of various kinds abide with him. It is said that the site of Babylon is a desert where the lion and the jackal prowl. If, as here, an ancient cellar is uncovered, there springs up at once a crop of rank and noxious weeds, evidence of a certain unwholesome fertility, — by which perchance the earth relieves herself of the poisonous qualities which have been imparted to her.

[1] I learn that it was formerly cultivated in Concord, but Temple, who has raised a little for two years past a mile and a quarter west of this, thinks he is the only one who has cultivated any in C. of late years.

[2] [See *Excursions*, p. 201; Riv. 247.]

As if what was foul, baleful, grovelling, or obscene in the inhabitants had sunk into the earth and infected it. Certain qualities are there in excess in the soil, and the proper equilibrium will not be attained until after the sun and air have purified the spot. The very shade breeds saltpetre. Yet men value this kind of earth highly and will pay a price for it, as if it were as good a soil for virtue as for vice.

In other places you find henbane and the Jamestown-weed and the like, in cellars, — such herbs as the witches are said to put into their caldron.

It would be fit that the tobacco plant should spring up on the house-site, aye on the grave, of almost every householder of Concord. These vile weeds are sown by vile men. When the house is gone they spring up in the corners of cellars where the cider-casks stood always on tap, for murder and all kindred vices will out. And that rank crowd which lines the gutter, where the wash of the dinner dishes flows, are but more distant parasites of the host. What obscene and poisonous weeds, think you, will mark the site of a Slave State? — what kind of Jamestown-weed?

There are mallows for food, — for cheeses, at least; rich-weed for high living; the nettle for domestic felicity, — a happy disposition; black nightshade, tobacco, henbane, and Jamestown-weed as symbols of the moral atmosphere and influences of that house, the idiocy and insanity of it; dill and Jerusalem-oak and catnep for senility grasping at a straw; and beggar-ticks for poverty.[1]

[1] *Vide* next page.

I see the fall dandelions all closed in the rain this afternoon. Do they, then, open only in fair or cloudy forenoons and cloudy afternoons?

There is mallow with its pretty little button-shaped fruit, which children eat and call cheeses, — eaten green. There are several such fruits discoverable and edible by children.

The mountain-ash trees are alive with robins and cherry-birds nowadays, stripping them of their fruit (in drooping clusters). It is exceedingly bitter and *austere* to my taste. Such a tree fills the air with the watch-spring-like note of the cherry-birds coming and going.

Sept. 23. Pretty copious rain in the night.

11 A. M. — River risen about fourteen inches above lowest this year (or thirteen and three quarters above my mark by boat).

What an army of non-producers society *produces*, — ladies generally (old and young) and gentlemen *of leisure*, so called! Many think themselves well employed as charitable dispensers of wealth which somebody else earned, and these who produce nothing, being of the most luxurious habits, are precisely they who want the most, and complain loudest when they do not get what they want. They who are literally paupers maintained at the public expense are the most importunate and insatiable beggars. They cling like the glutton to a living man and suck his vitals up. To every locomotive man there are three or four deadheads clinging to him, as if they conferred a great favor on society by living

upon it. Meanwhile they fill the churches, and die and revive from time to time. They have nothing to do but sin, and repent of their sins. How can you expect such bloodsuckers to be happy? [1]

Not only foul and poisonous weeds grow in our tracks, but our vileness and luxuriance make simple and wholesome plants rank and weed-like. All that I ever got a premium for was a monstrous squash, so coarse that nobody could eat it. Some of these bad qualities will be found to lurk in the pears that are invented in and about the purlieus of great towns. "The evil that men do lives after them." The corn and potatoes produced by excessive manuring may be said to have, not only a coarse, but a poisonous, quality. They are made food [for] hogs and oxen too. What creatures is the grain raised on the corn-fields of Waterloo food for, unless it be for such as prey upon men? Who cuts the grass in the graveyard? I can detect the site of the shanties that have stood all along the railroads by the ranker vegetation. I do not go there for delicate wild-flowers.

It is important, then, that we should air our lives from time to time by removals, and excursions into the fields and woods, — starve our vices. Do not sit so long over any cellar-hole as to tempt your neighbor to bid for the privilege of digging saltpetre there.

So live that only the most beautiful wild-flowers will spring up where you have dwelt, — harebells, violets, and blue-eyed grass.[2]

[1] *Vide* back, Sept. 16th.
[2] *Vide* Oct. 13th.

Sept. 24. P. M. — To Melvin's Preserve.

Was that a flock of grackles on the meadow? I have not seen half a dozen blackbirds, methinks, for a month.

I have many affairs to attend to, and feel hurried these days. Great works of art have endless leisure for a background, as the universe has space. Time stands still while they are created. The artist cannot be in [a] hurry. The earth moves round the sun with inconceivable rapidity, and yet the surface of the lake is not ruffled by it. It is not by a compromise, it is not by a timid and feeble repentance, that a man will save his soul and *live*, at last. He has got to *conquer* a clear field, letting Repentance & Co. go. That 's a well-meaning but weak firm that has assumed the debts of an old and worthless one. You are to fight in a field where no allowances will be made, no courteous bowing to one-handed knights. You are expected to do your duty, not in spite of every thing but *one*, but in spite of *everything*.

See a green snake.

Stedman Buttrick's handsome maple and pine swamp is full of cinnamon ferns. I stand on the elevated road, looking down into it. The trees are very tall and slender, without branches for a long distance. All the ground, which is perfectly level, is covered and concealed, as are the bases of the trees, with the tufts of cinnamon fern, now a pale brown. It is a very pretty sight, these northern trees springing out of a groundwork of ferns. It is like pictures of the tropics, except that here the palms are the undergrowth. You could not have arranged a nosegay more tastefully. It is a rich

groundwork, out of which the maples and pines spring.[1] But outside the wood and by the roadside, where they are exposed, these ferns are withered, shrivelled, and brown, for they are tenderer than the dicksonia. The fern, especially if large, is so foreign and tropical that these remind me of artificial groundworks set in sand, to set off other plants. These ferns (like brakes) begin to decay, *i. e.* to turn yellow or brown and ripen, as here, before they are necessarily frost-bitten. Theirs is another change and decay, like that of the brake and sarsaparilla in the woods and swamps, only later, while the exposed ones are killed before they have passed through all their changes. The exposed ones attained to a brighter yellow early and were then killed; the shaded ones pass through various stages of rich, commonly pale brown, as here, and last much longer. The brown ones are the most interesting.

Going along this old Carlisle road, — road for walkers, for berry-pickers, and no more worldly travellers; road for Melvin and Clark, not for the sheriff nor butcher nor the baker's jingling cart; road where all wild things and fruits abound, where there are countless rocks to jar those who venture there in wagons; which no jockey, no wheelwright in his right mind, drives over, no little spidery gigs and Flying Childers; road which leads to and through a great but not famous garden, zoölogical and botanical garden, at whose *gate* you never arrive,[2] — as I was going along there, I perceived the grateful scent of the dicksonia fern, now

[1] *Vide* Aug. 23d, 1858.

[2] *Vide* forward.

partly decayed, and it reminds me of all up-country with its springy mountainsides and unexhausted vigor. Is there any essence of dicksonia fern, I wonder? Surely that giant who, my neighbor expects, is to bound up the Alleghanies will have his handkerchief scented with that. In the lowest part of the road the dicksonia by the wall-sides is more than half frost-bitten and withered, — a sober Quaker-color, brown crape! — though not so tender or early [?] as the cinnamon fern; but soon I rise to where they are more yellow and green, and so my route is varied. On the higher places there are very handsome tufts of it, all yellowish outside and green within. The sweet fragrance of decay! When I wade through by narrow cow-paths, it is as if I had strayed into an ancient and decayed herb-garden. Proper for old ladies to scent their handkerchiefs with. Nature perfumes her garments with this essence now especially. She gives it to those who go a-barberrying and on dank autumnal walks. The essence of this as well as of new-mown hay, surely! The very scent of it, if you have a decayed frond in your chamber, will take you far up country in a twinkling. You would think you had gone after the cows there, or were lost on the mountains. It will make you as cool and well as a frog, — a wood frog, *Rana sylvatica*. It is the scent the earth yielded in the saurian period, before man was created and fell, before milk and water were invented, and the mints. Far wilder than they. *Rana sylvatica* passed judgment on it, or rather that peculiar-scented *Rana palustris*. It was in his reign it was introduced. That is the scent of the Silurian Period precisely,

and a modern beau may scent his handkerchief with it. Before man had come and the plants that chiefly serve him. There were no *Rosaceæ* nor mints then. So the earth smelled in the Silurian (?) Period, before man was created and any soil had been debauched with manure. The saurians had their handkerchiefs scented with it. For all the ages are represented still and you can smell them out.

A man must attend to Nature closely for many years to know when, as well as where, to look for his objects, since he must always anticipate her a little. Young men have not learned the phases of Nature; they do not know what constitutes a year, or that one year is like another. I would know when in the year to expect certain thoughts and moods, as the sportsman knows when to look for plover.

Though you may have sauntered near to heaven's gate, when at length you return toward the village you give up the enterprise a little, and you begin to fall into the old ruts of thought, like a regular roadster. Your thoughts very properly fail to report themselves to headquarters. Your thoughts turn toward night and the evening mail and become begrimed with dust, as if you were just going to put up at (with?) the tavern, or even come to make an exchange with a brother clergyman here on the morrow.

Some eyes cannot see, even through a spy-glass. I showed my spy-glass to a man whom I met this afternoon, who said that he wanted to see if he could look through it. I tried it carefully on him, but he failed. He said that he tried a lot lately on the muster-field

but he never could see through them, somehow or other everything was all a blur. I asked him if he considered his eyes good. He answered that they were good to see far. They looked like two old-fashioned china saucers. He kept steadily chewing his quid all the while he talked and looked. This is the case with a great many, I suspect. Everything is in a blur to them. He enjoys the distinction of being the only man in the town who raises his own tobacco. Seeing is not in them. No focus will suit them. You wonder how the world looks to them, — if those are *eyes* which they have got, or bits of old china, familiar with soapsuds.

As I stood looking over a wall this afternoon at some splendid red sumach bushes, now in their prime, I saw Melvin the other side of the wall and hailed him. "What are *you* after there?" asked he. "After the same thing that you are, perhaps," answered I. But I mistook, this time, for he said that he was looking amid the huckleberry bushes for some spectacles which a woman lost there in the summer. It was his mother, no doubt.

Road — that old Carlisle one — that leaves towns behind; where you put off worldly thoughts; where you do not carry a watch, nor remember the proprietor; where the proprietor is the only trespasser, — looking after *his* apples! — the only one who mistakes his calling there, whose title is not good; where fifty may be a-barberrying and you do not see one. It is an endless succession of glades where the barberries grow thickest, successive yards amid the barberry bushes where you

do not see out. There I see Melvin and the robins, and many a nut-brown maid *sashé*-ing [*sic*] to the barberry bushes in hoops and crinoline, and none of them see me. The world-surrounding hoop! faery rings! Oh, the jolly cooper's trade it is the best of any! Carried to the furthest isles where civilized man penetrates. This the girdle they 've put round the world! Saturn or Satan set the example. Large and small hogsheads, barrels, kegs, worn by the misses that go to that lone schoolhouse in the Pinkham notch. The lonely horse in its pasture is glad to see company, comes forward to be noticed and takes an apple from your hand. Others are called *great* roads, but this is greater than they all. The road is only laid out, offered to walkers, not *accepted* by the town and the travelling world. To be represented by a dotted line on charts, or drawn in lime-juice, undiscoverable to the uninitiated, to be held to a warm imagination. No guide-boards indicate it. No odometer would indicate the miles a wagon had run there. Rocks which the druids *might* have raised — if they could. There I go searching for malic acid of the right quality, with my tests. The process is simple. Place the fruit between your jaws and then endeavor to make your teeth meet. The very earth contains it. The Easterbrooks Country contains malic acid.

To my senses the dicksonia fern has the most wild and primitive fragrance, quite unalloyed and untamable, such as no human institutions give out,—the early morning fragrance of the world, antediluvian, strength and hope imparting. They who scent it can never faint. It is ever a new and untried field where it grows, and

only when we think original thoughts can we perceive it. If we keep that on [*sic*] our boudoir we shall be healthy and evergreen as hemlocks. Older than, but related to, strawberries. Before strawberries were, it was, and it will outlast them. Good for the trilobite and saurian in us; death to dandies. It yields its scent most morning and evening. Growing without manure; older than man; refreshing him; preserving his original strength and innocence. When the New Hampshire farmer, far from travelled roads, has cleared a space for his mountain home and conducted the springs of the mountain to his yard, already it grows about the sources of that spring, before any mint is planted in his garden. There his sheep and oxen and he too scent it, and he realizes that the world is new to him. There the pastures are rich, the cattle do not die of disease, and the men are strong and free. The wild original of strawberries and the rest.

Nature, the earth herself, is the only panacea. They bury poisoned sheep up to the necks in earth to take the poison out of them.

After four days cloud and rain we have fair weather. A great many have improved this first fair day to come a-barberrying to the Easterbrooks fields. These bushy fields are all alive with them, though I scarcely see one. I meet Melvin loaded down with barberries, in bags and baskets, so that he has to travel by stages and is glad to stop and talk with me. It is better to take thus what Nature offers, in her season, than to buy an extra dinner at Parker's.

The sumach berries are probably past their beauty. Fever-bush berries are scarlet now, and also green.

They have a more spicy taste than any of our berries, carrying us in thought to the spice islands. Taste like lemon-peel. The panicled andromeda berries (?) begin to brown. The bayberry berries are apparently ripe, though not so gray as they will be, — more lead-colored. They bear sparingly here. Leaves not fallen nor changed, and I the more easily find the bushes amid the changed huckleberries, brakes, etc., by their greenness.

The poke on Eb. Hubbard's hillside has been considerably frost-bitten before the berries are one-third ripe. It is in flower still. Great drooping cylindrical racemes of blackish-purple berries, six inches or more in length, tapering a little toward the end; great flat blackish and ripe berries at base, with green ones and flowers at the other end; all on brilliant purple or crimson-purple peduncle and pedicels.[1]

Those thorns by Shattuck's barn, now nearly leafless, have hard green fruit as usual.

The shrub oak is apparently the most fertile of our oaks. I count two hundred and sixty-six acorns on a branch just two feet long. Many of the cups are freshly empty now, showing a pretty circular pink scar at the bottom, where the acorn adhered. They are of various forms and sizes on different shrubs; are now turning dark-brown and showing their converging meridional light-brown lines. Never fear for striped squirrels in our shrub oak land.

Am surprised to find, by Botrychium Swamp, a *Rhus*

[1] [The word "poke" appears here, drawn across the page in large characters now (1906) of a dirty light-brown color. The stain is doubtless what remains of the poke berry's purple juice.]

radicans which is quite a tree by itself. It is about nine feet high by nine in width, growing in the midst of a clump of barberry bushes, which it overhangs. It is now at the height of its change, very handsome, scarlet and yellow, and I did not at first know what it was. I found it to consist of three or four branches, each nearly two inches thick and covered with those shaggy fibres, and these are twined round some long-since rotted barberry stems, and around one another, and now make a sizable-looking trunk, which rises to the height of four feet before it branches, and then spreads widely every way like an oak. It was, no doubt, indebted to the barberry for support at first, but now its very branches are much larger than that, and it far overtops and overspreads all the barberry stems.

Sept. 25. P. M. — To Emerson's Cliff.

Holding a white pine needle in my hand, and turning it in a favorable light, as I sit upon this cliff, I perceive that each of its three edges is notched or serrated with minute forward-pointing bristles. So much does Nature avoid an unbroken line that even this slender leaf is serrated; though, to my surprise, neither Gray nor Bigelow mention it. Loudon, however, says, "Scabrous and inconspicuously serrated on the margin; spreading in summer, but in winter contracted, and lying close to the branches." Fine and smooth as it looks, it is serrated after all. This is its concealed wildness, by which it connects itself with the wilder oaks.

Prinos berries are fairly ripe for a few days. Moles work in meadows.

I see at Brister Spring Swamp the (apparently) *Aspidium Noveboracense*, more than half of it turned white. Also some dicksonia is about equally white. These especially are the white ones. There is another, largish, and more generally decayed than either of these, with large serrated segments, rather far apart, — perhaps the *Asplenium Filix-fœmina* (?). The first may be called now the white fern, — with rather small entirish and flat segments close together. In shade is the laboratory of white. Color is produced in the sun. The cinnamon ferns are all a decaying brown there. The sober brown colors of those ferns are in harmony with the twilight of the swamp. The terminal shield fern and the *Aspidium spinulosum* (?) are still fresh and green, the first as much so as the polypody.

At 2 P. M. the river is sixteen and three quarters inches above my hub[?] by boat.

Nabalus albus still common, though much past prime. Though concealed amid trees, I find three humblebees on one.

As when Antæus touched the earth, so when the mountaineer scents the fern, he bounds up like a chamois, or mountain goat, with renewed strength. There is no French perfumery about it. It has not been tampered with by any perfumer to their majesties. It is the fragrance of those plants whose impressions we see on our coal. Beware of the cultivation that eradicates it.

The very crab-grass in our garden is for the most part a light straw-color and withered, probably by the frosts of the

15th and 16th, looking almost as white as the corn; and hundreds of sparrows (chip-birds?) find their food amid it. The same frosts that kill and whiten the corn whiten many grasses thus.

Sept. 26. P. M. — To Clamshell by boat.

The *Solanum dulcamara* berries are another kind which grows in drooping clusters. I do not know any clusters more graceful and beautiful than these drooping cymes of scarlet or translucent cherry-colored elliptical berries with steel-blue (or lead?) purple pedicels (not peduncles) like those leaves on the tips of the branches. These in the water at the bend of the river are peculiarly handsome, they are so long an oval or ellipse. No berries, methinks, are so well spaced and agreeably arranged in their drooping cymes, — somewhat hexagonally like a honeycomb. Then what a variety of color! The peduncle and its branches are green, the pedicels and sepals only that rare steel-blue purple, and the berries a clear translucent cherry red. They hang more gracefully over the river's brim than any pendants in a lady's ear. The cymes are of irregular yet regular form, not too crowded, elegantly spaced. Yet they are considered poisonous! Not to look at, surely. Is it not a reproach that so much that is beautiful is poisonous to us? Not in a stiff, flat cyme, but in different stages above and around, finding ample room in space. But why should they not be poisonous? Would it not be in bad taste to eat these berries which are ready to feed another sense? A drooping berry should always be of an oval or pear shape. Nature not

only produces good wares, but puts them up handsomely. Witness these pretty-colored and variously shaped skins in which her harvests, the seeds of her various plants, are now being packed away. I know in what bags she puts her nightshade seeds, her cranberries, viburnums, cornels, by their form and color, often by their fragrance; and thus a legion of consumers find them.

The celtis berries are still green. The pontederia is fast shedding its seeds of late. I saw a parcel suddenly rise to the surface of their own accord, leaving the axis nearly bare. Many are long since bare. They float, at present, but probably sink at last. There are a great many floating amid the pads and in the wreck washed up, of these singular green spidery(?)-looking seeds. Probably they are the food of returning water-fowl. They are ripe, like the seeds of different lilies, at the time the fowl return from the north.

I hear a frog or two, either *palustris* or *halecina*, croak and *work* faintly, as in spring, along the side of the river. So it is with flowers, birds, and frogs a renewal of spring.

Hearing a sharp *phe-phe* and again *phe-phe-phe*, I look round and see two (probably larger) yellow-legs, like pigeons, standing in the water by the bare, flat ammannia shore, their whole forms reflected in the water. They allow me to paddle past them, though on the alert.

Heavy Haynes says he has seen one or two fish hawks within a day or two. Also that a boy caught a very large snapping turtle on the meadow a day or two

ago. He once dug one up two or three feet deep in the meadow in winter when digging mud. He was rather dormant. Says he remembers a fish-house that stood by the river at Clamshell.

Observed the spiders at work at the head of Willow Bay. Their fine lines are extended from one flag or bur-reed to another, even six or eight feet, perfectly parallel with the surface of the water and only a few inches above it. I see some,—though it requires a very favorable light to detect them, they are so fine, — blowing off perfectly straight horizontally over the water, only half a dozen inches above it, as much as seven feet, one end fastened to a reed, the other free. They look as stiff as spears, yet the free end waves back and forth horizontally in the air several feet. They work thus in calm and fine weather when the water is smooth. Yet they can run over the surface of the water readily.

The savage in man is never quite eradicated. I have just read of a family in Vermont who, several of its members having died of consumption, just *burned* the lungs, heart, and liver of the last deceased, in order to prevent any more from having it.

How feeble women, or rather ladies, are! They cannot bear to be shined on, but generally carry a parasol to *keep off* the sun.

Sept. 28. At Cattle-Show to-day I noticed that the ladies' apple (small, one side green, the other red, glossy) and maiden's-blush (good size, yellowish-white with a pink blush) were among the handsomest. The pumpkin-sweet one of the largest exhibited. The ram's-

horn was a handsome uniformly very dark purple or crimson.

The white pine seed is very abundant this year, and this must attract more pigeons. Coombs tells me that he finds the seed in their crops. Also that he found within a day or two a full-formed egg with shell in one.

In proportion as a man has a poor ear for music, or loses his ear for it, he is obliged to go far for it or fetch it from far, and pay a great price for such as he *can* hear. Operas, ballet-singers, and the like only affect him. It is like the difference between a young and healthy appetite and the appetite of an epicure, between a sweet crust and a mock-turtle soup.

As the lion is said to lie in a thicket or in tall reeds and grass by day, slumbering, and sallies at night, just so with the cat. She will ensconce herself for the day in the grass or weeds in some out-of-the-way nook near the house, and arouse herself toward night.

Sept. 29. Down railroad and to Fair Haven Hill.

In Potter's maple swamp I see the (apparently) *Aspidium Thelypteris* (revolute segments) about half decaying or whitish, but later than the flowering fern and the osmunda, which are almost entirely withered and brown there.

Dogwood (poison) berries are ripe, and leaves begun to fall.

Juniperus repens berries are quite green yet. I see some of last year's *dark*-purple ones at the base of the branchlets. There is a very large specimen on the side of Fair Haven Hill, above Cardinal Shore. This is very

handsome this bright afternoon, especially if you stand on the lower and sunny side, on account of the various ways in which its surging flakes and leafets, green or silvery, reflect the light. It is as if we were giants, and looked down on an evergreen forest from whose flaky surface the light is variously reflected. Though so low, it is so dense and rigid that neither men nor cows think of wading through it. We get a bird's-eye view of this evergreen forest, as a hawk sailing over, looking into its unapproachable clefts and recesses, reflecting a green or else a cheerful silvery light.

Horse-chestnuts strew the roadside, very handsome-colored but simply formed nuts, looking like mahogany knobs, with the waved and curled grain of knots.

Having just dug my potatoes in the garden, — which did not turn out very well, — I took a basket and trowel and went forth to dig my wild potatoes, or ground-nuts, by the railroad fence. I dug up the tubers of some half a dozen plants and found an unexpected yield. One string weighed a little more than three quarters of a pound. There were thirteen which I should have put with the large potatoes (this year) if they had been the common kind. The biggest was two and three quarters inches long and seven inches in circumference the smallest way. Five would have been called good-sized potatoes. It is but a slender vine now, killed by frost, and not promising such a yield, but deep in the soil (or sand), five or six inches or sometimes a foot, you come to the string of brown and commonly *knubby* nuts. The cuticle of the tuber is more or less cracked longitudinally, forming meridional furrows, and the roots (?), or shoots,

bear a large proportion to the tuber. In case of a famine I should soon resort to these roots. If they increased in size, on being cultivated, as much as the common potato has, they would become monstrous.[1]

Saw a warbler in Potter's Swamp, light-slate head and above and no bars on wings; yellow all beneath, except throat, which was lighter ash, and perhaps upper part of breast; a distinct light ring about eye, iris-like; light bill, and apparently flesh-color legs, etc. Very inquisitive, hopping within ten feet, with a *chip*. It is somewhat like the Nashville warbler.[2]

Sept. 30. P. M. — Up Assabet.

Ever since the unusually early and severe frost of the 16th, the evergreen ferns have been growing more and more distinct amid the fading and decaying and withering ones, and the sight of those suggests a cooler season. They are greener than ever, by contrast. The terminal shield fern is one of the handsomest. The most decidedly evergreen are the last, polypody, *Aspidium marginale*, and *Aspidium spinulosum* of Woodis Swamp and Brister's. *Asplenium Filix-fœmina* (?) is decaying, maybe a little later than the dicksonia, — the largish fern with long, narrow pinnules deeply cut and toothed, and reniform fruit-dots.

Of the twenty-three ferns which I seem to know here, seven may be called evergreens. As far as I know, the earliest to wither and fall are the brake (mostly fallen),

[1] *Vide* Oct. 15th.

[2] Was it a yellow-rump warbler? [A surprising question. The bird may have been a Connecticut warbler.]

the *Osmunda cinnamomea* (begun to be stripped of leaves), *O. Claytoniana*, and *O. regalis* (the above four generally a long time withered, or say since the 20th); also (5th), as soon, the exposed onoclea; then (6th) the dicksonia, (7th) *Aspidium Noveboracense*, (8th) *Thelypteris*, (9th) *Filix-fœmina* (the last four now fully half faded or decayed or withered). Those not seen are *Adiantum pedatum*, *Woodwardia Virginica*, *Asplenium thelypteroides*, *Woodsia Ilvensis*, *Aspidium cristatum*, *Lygodium palmatum*, *Botrychium Virginicum*.

Some acorns (swamp white oak) are browned on the trees, and some bass berries. Most shrub oak acorns browned.

The wild rice is almost entirely fallen or eaten, apparently by some insect, but I see some green and also black grains left.[1]

[1] For more of September, *vide* [p. 362].

VIII

OCTOBER, 1859

(ÆT. 42)

Oct. 1. P. M. — To the beeches.

Looking down from Pine Hill, I see a fish hawk over Walden.

The shrub oaks on this hill are now at their height, both with respect to their tints and their fruit. The plateaus and little hollows are crowded with them three to five feet high, the pretty fruit, varying in size, pointedness, and downiness, being now generally turned brown, with light, converging meridional lines. Many leading shoots are perfectly bare of leaves, the effect of the frost, and on some bushes half the cups are empty, but these cups generally bear the marks of squirrels' teeth, and probably but few acorns have fallen of themselves yet. However, they are just ready to fall, and if you bend back the peduncles on these bare and frost-touched shoots, you find them just ready to come off, separating at the base of the peduncle, and the peduncle remaining attached to the fruit. The squirrels, probably striped, must be very busy here nowadays. Though many twigs are bare, these clusters of brown fruit in their grayish-brown cups are unnoticed and almost invisible, unless you are looking for them, above the ground, which is strewn with their similarly colored leaves; *i. e.*, this leaf-strewn earth has the same general gray and brown color with the twigs and fruit, and you may

brush against great wreaths of fruit without noticing them. You press through dense groves full of this interesting fruit, each seeming prettier than the last. Now is the time for shrub oak acorns, then, if not for others. I see where the squirrels have left the shells on rocks and stumps. They take the acorn out of its cup on the bush, leaving the cup there with a piece bit out of its edge.

The little beechnut burs are mostly empty, and the ground is strewn with the nuts mostly empty and abortive. Yet I pluck some apparently full grown with meat. This fruit is apparently now at its height.

Oct. 2. Rain in the night and cloudy this forenoon.

We had all our dog-days in September this year. It was too dry before, even for fungi. Only the last three weeks have we had any fungi to speak of. Nowadays I see most of the election-cake fungi, with crickets and slugs eating them. I see a cricket feeding on an apple, into which he has eaten so deep that only his posteriors project, but he does not desist a moment though I shake the apple and finally drop it on the ground.

P. M. — To lygodium.

One of the large black birches on Tarbell's land is turned completely brownish-yellow and has lost half its leaves; the other is green still.

I see in the corn-field above this birch, collected about the trunk of an oak, on the ground, fifty to a hundred ears of corn which have been stripped to the cob, evidently by the squirrels. Apparently a great

part of the kernels remain on the ground, but in every case the germ has been eaten out. It is apparent that the squirrel prefers this part, for he has not carried off the rest.

I perceive in various places, in low ground, this afternoon, the sour scent of cinnamon ferns decaying. It is an agreeable phenomenon, reminding me of the season and of past years.

So many maple and pine and other leaves have now fallen that in the woods, at least, you walk over a carpet of fallen leaves.

As I sat on an old pigeon-stand, not used this year, on the hill south of the swamp, at the foot of a tree, set up with perches nailed on it, a pigeon hawk, as I take it, came and perched on the tree. As if it had been wont to catch pigeons at such places.

That large lechea, now so freshly green and sometimes scarlet, looks as if it would make a pretty edging like box, as has been suggested. The *Aster undulatus* and *Solidago cæsia* and often *puberula* are particularly prominent now, looking late and bright, attracting bees, etc. I see the *S. cæsia* so covered with the little fuzzy gnats as to be whitened by them. How bright the *S. puberula* in sprout-lands, — its yellow wand,[1] — perhaps in the midst of a clump of little scarlet or dark-purple black oaks! The *A. undulatus* looks fairer than ever, now that flowers are more scarce.

The climbing fern is perfectly fresh, — and apparently therefore an evergreen, — the more easily found amid the withered cinnamon and flowering ferns.

[1] Quite generally withered and fuzzy Oct. 14th, 1861.

Acorns generally, as I notice, — swamp white, shrub, black, and white, — are turned brown; but few are still green. Yet few, except of shrub oaks, have fallen. I hear them fall, however, as I stand under the trees. This would be the time to notice them.

How much pleasanter to go along the edge of the woods, through the field in the rear of the farmhouse, whence you see only its gray roof and its haystacks, than to keep the road by its door! This we think as we return behind Martial Miles's. I observed that many pignuts had fallen yesterday, though quite green.

Some of the *Umbelliferæ*, now gone to seed, are very pretty to examine. The *Cicuta maculata*, for instance, the concave umbel is so well spaced, the different umbellets (?) like so many constellations or separate systems in the firmament.

Hear a hylodes in the swamp.

Oct. 3. P. M. — To Bateman's Pond; back by hog-pasture and old Carlisle road.

Some faces that I see are so gross that they affect me like a part of the person improperly exposed, and it occurs to me that they might be covered, and, if necessary, some other, and perhaps better-looking, part of the person be exposed.

It is somewhat cooler and more autumnal. A great many leaves have fallen and the trees begin to look thin. You incline to sit in a sunny and sheltered place. This season, the fall, which we have now entered on, commenced, I may say, as long ago as when the first frost was seen and felt in low ground in August. From that

time, even, the year has been gradually winding up its accounts. Cold, methinks, has been the great agent which has checked the growth of plants, condensed their energies, and caused their fruits to ripen, in September especially. Perchance man never ripens within the tropics.[1]

I see on a wall a myrtle-bird in its October dress, looking very much like a small sparrow. Also everywhere about the edge of the woods this afternoon, sylvias rather large and of a greenish yellow above and beneath, perhaps white vent, and much dark brown above, getting their food on the white birches. The same in very distant places. Perhaps it is the birch louse they eat. What bird is this?[2] It is quite unlike the sparrow-like myrtle-bird above described, unless some of them are of this color now.

The *Woodsia Ilvensis* is partly withering or withered on the rocks, but not so much as the dicksonia. Yet it is evidently not evergreen.

I see the ground strewn with *Populus grandidentata* leaves in one place on the old Carlisle road, where one third are fallen. These yellow leaves are all thickly brown-spotted and are very handsome, somewhat leopard-like. It would seem that they begin to decay in spots at intervals all over the leaf, producing a very pretty effect. Think of the myriad variously tinted and spotted and worm-eaten leaves which now combine to produce the general impression of autumn! The ground is here strewn with thousands, any one of which,

[1] *Vide* [pp. 368, 369, 373, and 375].

[2] [Probably the black-poll warbler.]

if you carry it home, it will refresh and delight you to behold. If we have not the leopard and jaguar and tiger in our woods, we have all their spots and rosettes and stripes in our autumn-tinted leaves.

The ash trees are at their height now, if not earlier. Many of their leaves have fallen.

The dicksonia ferns by the old Carlisle road-side are now almost all withered to dark cinnamon, and the large cinnamon ferns in Buttrick's wood are no longer noticed.

Looking from the hog-pasture over the valley of Spencer Brook westward, we see the smoke rising from a huge chimney above a gray roof amid the woods, at a distance, where some family is preparing its evening meal. There are few more agreeable sights than this to the pedestrian traveller. No cloud is fairer to him than that little bluish one which issues from the chimney. It suggests all of domestic felicity beneath. There beneath, we suppose, that life is lived of which we have only dreamed. In our minds we clothe each unseen inhabitant with all the success, with all the serenity, which we can conceive of. If old, we imagine him serene; if young, hopeful. Nothing can exceed the perfect peace which reigns there. We have only to see a gray roof with its plume of smoke curling up amid the trees to have this faith. There we suspect no coarse haste or bustle, but serene labors which proceed at the same pace with the declining day. *There* is no hireling in the barn nor in the kitchen. Why does any distant prospect ever charm us? Because we instantly and inevitably imagine a life to be lived there such as is not lived else-

where, or where we are. We presume that success is the rule. We forever carry a perfect sampler in our minds. Why are distant valleys, why lakes, why mountains in the horizon, ever fair to us? Because we realize for a moment that they may be the home of man, and that man's life may be in harmony with them. Shall I say that we thus forever delude ourselves? We do not suspect that *that* farmer goes to the depot with his milk. *There* the milk is not watered. We are constrained to imagine a life in harmony with the scenery and the hour. The sky and clouds, and the earth itself, with their beauty forever preach to us, saying, Such an abode we offer you, to such and such a life we encourage you. *There* is not haggard poverty and harassing debt. There is not intemperance, moroseness, meanness, or vulgarity. Men go about sketching, painting landscapes, or writing verses which celebrate man's opportunities. To go into an actual farmer's family at evening, see the tired laborers come in from their day's work thinking of their wages, the sluttish help in the kitchen and sink-room, the indifferent stolidity and patient misery which only the spirits of the youngest children rise above, — that suggests one train of thoughts. To look down on that roof from a distance in an October evening, when its smoke is ascending peacefully to join the kindred clouds above, — that suggests a different train of thoughts. We think that we see these fair abodes and are elated beyond all speech, when we see only our own roofs, perchance. We are ever busy hiring house and lands and peopling them in our imaginations. There is no beauty in the sky, but in the eye that sees

it. Health, high spirits, serenity, these are the great landscape-painters. Turners, Claudes, Rembrandts are nothing to them. We never see any beauty but as the garment of some virtue. Men love to walk in those picture-galleries still, because they have not quite forgotten their early dreams. When I see only the roof of a house above the woods and do not know whose it is, I presume that one of the worthies of the world dwells beneath it, and for a season I am exhilarated at the thought. I would fain sketch it that others may share my pleasure. But commonly, if I see or know the occupant, I am affected as by the sight of the almshouse or hospital.

Wild apples are perhaps at their height, or perhaps only the earlier ones.

Those *P. grandidentata* leaves are wildly rich. So handsomely formed and floridly scalloped, to begin with, — a fine chrome yellow now richly spotted with dark brown like a leopard's skin, — they cover the still green sward by the roadside and the gray road thick as a pavement, each one worthy to be admired as a gem or work of Oriental art.

Among sound leaves I think of the fever-bush, *Rhus radicans*, beech, and shrub oak.

It was mainly the frost of September 15 and 16 that put an end to the summer, that put the finishing stroke to the already withering grass, and left it to bleach in the fields, turning russet with blackberry vines intermixed, earlier than usual. The same frost suddenly cut off the mikania and browned the button-bushes, causing the upper leaves at length to fall. It must be the frost that

ripens nuts, — acorns, for example, — browning them. Frost and cold paint the acorn and the chestnut.

The hickory has spots with a central ring, evidently produced by an insect.

Consider the infinite promise of a man, so that the sight of his roof at a distance suggests an idyll or pastoral, or of his grave an Elegy in a Country Churchyard. How all poets have idealized the farmer's life! What graceful figures and unworldly characters they have assigned to them! Serene as the sky, emulating nature with their calm and peaceful lives. As I come by a farmer's to-day, the house of one who died some two years ago, I see the decrepit form of one whom he had engaged to "carry through," taking his property at a venture, feebly tying up a bundle of fagots with his knee on it, though time is fast loosening the bundle that he is. When I look down on that roof I am not reminded of the mortgage which the village bank has on that property, — that that family long since sold itself to the devil and wrote the deed with their blood. I am not reminded that the old man I see in the yard is one who has lived beyond his calculated time, whom the young one is merely "carrying through" in fulfillment of his contract; that the man at the pump is watering the milk. I am not reminded of the idiot that sits by the kitchen fire.

Oct. 4. When I have made a visit where my expectations are not met, I feel as if I owed my hosts an apology for troubling them so. If I am disappointed, I find that I have no right to visit them.

I have always found that what are called the best of manners are the worst, for they are simply the shell without the meat. They cover no life at all. *They* are the universal slaveholders, who treat men as things. Nobody holds you more cheap than the man of manners. They are marks by the help of which the wearers ignore you and remain concealed themselves. Are they such great characters that they feel obliged to make the journey of life incognito? Sailors swear; gentlemen make their manners to you.

All men sympathize by their lower natures; the few, only, by their higher. The appetites of the mistress are commonly the same as those of her servant, but her society is commonly more select. The help may have some of the tenderloin, but she must eat it in the kitchen.

P. M. — To Conantum.

How interesting now, by wall-sides and on open springy hillsides, the large, straggling tufts of the dicksonia fern above the leaf-strewn greensward, the cold fall-green sward! They are unusually preserved about the Corner Spring, considering the earliness of this year. Long, handsome lanceolate green fronds, pointing in every direction, recurved and full of fruit, intermixed with yellowish and sere brown and shrivelled ones. The whole clump, perchance, strewn with fallen and withered maple leaves and overtopped by now withered and unnoticed osmundas. Their lingering greenness so much the more noticeable now that the leaves (generally) have changed. They affect us as if they were evergreen, such persistent life and greenness in the midst of their own decay. I do not notice them

so much in summer. No matter how much withered they are, with withered leaves that have fallen on them, moist and green they spire above them, not fearing the frosts, fragile as they are. Their greenness so much the more interesting because so many have already fallen and we know that the first severer frost will cut off them too. In the summer greenness is cheap; now it is something comparatively rare and is the emblem of life to us.

It is only when we forget all our learning that we begin to know. I do not get nearer by a hair's breadth to any natural object so long as I presume that I have an introduction to it from some learned man. To conceive of it with a total apprehension I must for the thousandth time approach it as something totally strange. If you would make acquaintance with the ferns you must forget your botany. You must get rid of what is commonly called *knowledge* of them. Not a single scientific term or distinction is the least to the purpose, for you would fain perceive something, and you must approach the object totally unprejudiced. You must be aware that *no thing* is what you have taken it to be. In what book is this world and its beauty described? Who has plotted the steps toward the discovery of beauty? You have got to be in a different state from common. Your greatest success will be simply to perceive that such things are, and you will have no communication to make to the Royal Society. If it were required to know the position of the fruit-dots or the character of the indusium, nothing could be easier than to ascertain it; but if it is required that

you be affected by ferns, that they amount to anything, signify anything, to you, that they be another sacred scripture and revelation to you, helping to redeem your life, this end is not so surely accomplished. In the one case, you take a sentence and analyze it, you decide if it is printed in large [*sic*] primer or small pica; if it is long or short, simple or compound, and how many clauses it is composed of; if the i's are all dotted, or some for variety without dots; what the color and composition of the ink and the paper; and it is considered a fair or mediocre sentence accordingly, and you assign its place among the sentences you have seen and kept specimens of. But as for the meaning of the sentence, that is as completely overlooked as if it had none. This is the Chinese, the Aristotelean, method. But if you should ever perceive the meaning you would disregard all the rest. So far science goes, and it punctually leaves off there, — tells you finally where it is to be found and its synonyms, and rests from its labors.

This is a fine and warm afternoon, Indian-summer-like, but we have not had cold enough before it.

Birds are now seen more numerously than before, as if called out by the fine weather, probably many migrating birds from the north. I see and hear probably flocks of grackles with their split and shuffling note, but no red-wings for a long time; chip-birds (but without chestnut crowns; is that the case with the young?), bay-wings on the walls and fences, and the yellow-browed sparrows. Hear the pine warblers in the pines, about the needles, and see them on the ground and on rocks, with a yellow ring round the eye (!), reddish legs,

slight whitish bar on wings. Going over the large hillside stubble-field west of Holden Wood, I start up a large flock of shore larks; hear their *sveet sveet* and *sveet sveet sveet*, and see their tails dark beneath. They are very wary, and run in the stubble for the most part invisible, while one or two appear to act the sentinel on rock, peeping out behind it perhaps, and give their note of alarm, when away goes the whole flock. Such a flock circled back and forth several times over my head, just like ducks reconnoitring before they alight. If you look with a glass you are surprised to see how alert these spies are. When they alight in some stubbly hollow they set a watch or two on the rocks to look out for foes. They have dusky bills and legs.

The birds seem to delight in these first fine days of the fall, in the warm, hazy light, — robins, bluebirds (in families on the almost bare elms), phœbes, and probably purple finches. I hear half-strains from many of them, as the song sparrow, bluebird, etc., and the sweet *phe-be* of the chickadee.

Now the year itself begins to be ripe, ripened by the frost, like a persimmon.[1]

The maidenhair fern at Conantum is apparently unhurt by frost as yet.

Oct. 6. A. M. — To Boston.

Examine the pigeon and sparrow hawks in the Natural History collection. My wings and tail are apparently the pigeon hawk's. The sparrow hawks are decidedly red-brown with bluish heads and blue or

[1] *Vide* bottom of 11th.

slate sides; also are much more thickly barred with dark on wing-coverts, back, and tail than the pigeon hawk.

Oct. 7. The pontederia seeds which I dropped into a pitcher of water have now mostly sunk. As the outside decays they become heavier than water.

Oct. 9. P. M. — Boston.

Read a lecture to Theodore Parker's society.

Aster cordifolius abundant and commonly in bloom in Roxbury. See the privet everywhere with dense pyramidal clusters of berries. *Salsola kali* common in bloom, with pretty crimson flowers. *Chenopodium maritimum* perhaps in bloom. *Senecio vulgaris* still in bloom.

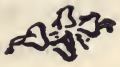
Oct. 10. White-throated sparrows in yard and close up to house, together with myrtle-birds (which fly up against side of house and alight on window-sills) and, I think, tree sparrows?

Colder weather, and the cat's fur grows.

Oct. 11. P. M. — To Cliffs.

Looking under large oaks, black and white, the acorns appear to have fallen or been gathered by squirrels, etc. I see in many *distant* places stout twigs (black or scarlet oak) three or four inches long which have been gnawed off by the squirrels, with four to seven acorns on each, and left on the ground. These twigs have been gnawed off on each side of the nuts in

order to make them more portable, I suppose. The nuts all abstracted and sides of the cups broken to get them out.



The note of the chickadee, heard now in cooler weather and above many fallen leaves, has a new significance.

There was a very severe frost this morning (ground stiffened), probably a chestnut-opening frost, a season-ripener, opener of the burs that inclose the Indian summer. Such is the cold of early or middle October. The leaves and weeds had that stiff, hoary appearance.

Oct. 12. P. M. — To Hubbard's Close.

The common goldenrods on railroad causeway have begun to look hoary or gray, the down showing itself, — that November feature.

I see scattered flocks of bay-wings amid the weeds and on the fences.

There are now apparently very few ferns left (except the evergreen ones), and those are in sheltered places. This morning's frost will nearly finish them. Now for lycopodiums (the *dendroideum* not yet apparently in bloom), the *dendroideum* and *lucidulum*, etc., — how vivid a green! — lifting their heads above the moist fallen leaves.

We have now fairly begun to be surrounded with the brown of withered foliage, since the young white oaks have withered. This phenomenon begins with the very earliest frost (as this year August 17th), which kills some ferns and other most sensitive plants; and so gradually the plants, or their leaves, are killed and withered that we

scarcely notice it till we are surrounded with the scenery of November.[1]

I see quinces commonly left out yet, though apples are gathered. Probably their downy coats defend them.

Going through Clintonia Swamp, I see many of those buff-brown puffballs one to two inches [in] diameter on the ground, partly open and with water in them and partly entire as yet, with a cracked surface.

The willows on the Turnpike resound with the hum of bees, almost as in spring! I see apparently yellow wasps, hornets, and small bees attracted by something on their twigs.

Oct. 13. P. M. — Up Assabet.

Many of the small hypericums, *mutilum* and *Canadense*, have survived the frosts as yet, after all. The hemlock seed is now in the midst of its fall, some of it, with the leaves, floating on the river. The cones, being thus expanded, are more conspicuous on the trees. Many feverwort berries are fresh yet, though the leaves are quite withered. They are remarkable for their peculiar color. The thorn fruit on the hill is considerably past prime, though abundant and reddening the bushes still. The common alder up the Assabet is nerved like the hornbeam. I see no acorns on the trees. They appear to have all fallen before this.

The swamp amelanchier is leafing again, as usual. What a pleasing phenomenon, perhaps an Indian-summer growth, an anticipation of the spring, like the notes of birds and frogs, etc., an evidence of warmth and

[1] Yet these same plants will wither and fall without frost.

genialness. Its buds are annually awakened by the October sun as if it were spring. The shad-bush is leafing again by the sunny swamp-side. It is like a youthful or poetic thought in old age. Several times I have been cheered by this sight when surveying in former years. The chickadee seems to lisp a sweeter note at the sight of it. *I* would not fear the winter more than the shad-bush which puts forth fresh and tender leaves on its approach. In the fall I will take this for my coat-of-arms. It seems to detain the sun that expands it. These twigs are so full of life that they can hardly contain themselves. They ignore winter. They anticipate spring. What faith! Away in some warm and sheltered recess in the swamp you find where these leaves have expanded. It is a foretaste of spring. In my latter years, let me have some *shad-bush* thoughts.[1]

I perceive the peculiar scent of the witch-hazel in bloom for several rods around, which at first I refer to the decaying leaves. I see where dodder was killed, with the button-bush, perhaps a week.

British naturalists very generally apologize to the reader for having devoted their attention to natural history to the neglect of some important duty.

Among plants which spring in cellars (*vide* September 22d) might be mentioned funguses. I remember seeing in an old work a plate of a fungus which grew in a wine-cellar and got its name from that circumstance. It is related in *Chambers's Journal* that Sir Joseph Banks, having caused a cask of wine to be placed in a cellar in order to improve it, "at the end of three years

[1] *Vide* Nov. 25th, 1858. *Vide* mountain-ash, Oct. 30th, 1858.

he directed his butler to ascertain the state of the wine, when, on attempting to open the cellar door, he could not affect it, in consequence of some powerful obstacle; the door was consequently cut down, when the cellar was found to be completely filled with a fungous production, so firm that it was necessary to use an axe for its removal. This appeared to have grown from, or to have been nourished by, the decomposing particles of the wine, the cask being empty, and carried up to the ceiling, where it was supported by the fungus." Perhaps it was well that the fungus instead of Sir Joseph Banks drank up the wine. The life of a wine-bibber is like that of a fungus.

Oct. 14. 9 A. M. — To and around Flint's Pond with Blake.

A fine Indian-summer day. The 6th and 10th were quite cool, and any particularly warm days since may be called Indian summer (?), I think.

We sit on the rock on Pine Hill overlooking Walden. There is a thick haze almost entirely concealing the mountains.

There is wind enough to raise waves on the pond and make it bluer. What strikes me in the scenery here now is the contrast of the unusually blue water with the brilliant-tinted woods around it. The tints generally may be about at their height. The earth appears like a great inverted shield painted yellow and red, or with imbricated scales of that color, and a blue navel in the middle where the pond lies, and a distant circumference of whitish haze. The nearer woods, where chestnuts

grow, are a mass of warm, glowing [yellow] (though the larger chestnuts have lost the greater part of their leaves and generally you wade through rustling chestnut leaves in the woods), but on other sides the red and yellow are intermixed. The red, probably of scarlet oaks on the south of Fair Haven Hill, is very fair.

The beech tree at Baker's fence is past prime and many leaves fallen.

The shrub oak acorns are now all fallen, — only one or two left on, — and their cups, which are still left on, are apparently somewhat incurved at the edge as they have dried, so that probably they would not hold the acorn now. The ground is strewn also with red oak acorns now, and, as far as I can discover, acorns of all kinds have fallen.

At Baker's wall two of the walnut trees are bare but full of green nuts (in their green cases), which make a very pretty sight as they wave in the wind. So distinct you could count every one against the sky, for there is not a leaf on these trees, but other walnuts near by are yet full of leaves. You have the green nut contrasted with the clean gray trunks and limbs. These are pignut-shaped.

The chestnuts generally have not yet fallen, though many have. I find under one tree a great many burs, apparently not cast down by squirrels — for I see no marks of their teeth — and not yet so opened that any of the nuts fall out. They do not all wait till frosts open the burs before they fall, then.

I see a black snake, and also a striped snake, out this warm day.

I see and hear many hawks for some weeks past. On the 11th I saw one as small as I ever saw, — I thought not larger than a kingbird, — as I stood on the Cliffs, hovering over the wood about on a level with me. It sailed directly only a rod or two, then flapped its wings fast and sailed on a rod or two further. Was it not a sparrow hawk? Dr. Kneeland says he sees it hereabouts and distinguishes it partly by its smaller size.

See great numbers of crickets in the cross-road from Tuttle's to Alcott's.

Populus grandidentata up Assabet yellow, but not quite at height.

Of my list of fruits for '54, all those named before August 15th were done this year by August 1st at least, except that the sumach berries still hold on, and bunch-berries undoubtedly, where they grow, also Jersey tea fruit, waxwork, privet common in gardens. Possibly some poke berries, still green, may turn, though the vines [*sic*] are killed. The birds may not have gathered quite all the mountain-ash (ours was stripped in about one day by them a week or two ago), and uva-ursi, of course, holds on. Perhaps trientalis fruit holds on. I have not noticed *Aralia nudicaulis* berries for some weeks, nor high blackberries for two or three weeks. Wild apples are perhaps now at height. Cat-tail ripe before July 31st. Alternate cornel fell long ago. Elder-berries are gone, how long? Muskmelons and watermelons with the early frosts of September 16th this year, except those up to this time in cellar. *Viburnum dentatum* probably done before October 1st.

Those on that list after October 15th (inclusive) stand thus: —

Barberries are gathered.
Thorn-apples much past prime, but many bushes still red with them.
Prinos berries fair as ever.
Red choke-berries done (though they may dry on).
Spikenard (not seen).
Fever-bush (not seen).[1]
Arum probably done (?).[2]
Vaccinium Oxycoccus (not seen).
Grapes all fallen, probably a week or more; generally before October.
Acorns of all kinds fallen (been falling for three or four weeks); can find none on the trees.[3]
Rose hips (not noticed).[4]
Viburnum Lentago probably done several weeks.
Poison-dogwood all ripe some time.
Cornus sericea generally fallen by September 30th; all probably by the 12th.
Waxwork (not seen).
Woodbine (not seen).
Fever-wort many still fresh, their peculiar corn-yellow, along the withering stems, October 13th; all leaves withered.
Zizania, some black left (and green) September 30th.
Checkerberries; see none yet full grown and colored, but there are very few this year.
Shrub oak acorns all fallen (can find but one or two left).[5]
The smilacina berries of both kinds more or less shrivelled for some weeks.
Yew probably done some time.
Maple viburnum (not seen), probably done several weeks.

[1] Oct. 14th, can't find any.
[2] Oct. 14th, see none.
[3] Yes; black oak and a great many shrub oak.
[4] Some sweet-briar hips frost-bitten before complete change.
[5] ! Hardly half fallen in another place.

Mitchella ripe a good while.
Medeola probably fallen several weeks.
Common cranberry (not seen).
Pontederia seeds are still falling, a few.
Asclepias Cornuti apparently not yet generally discounts.[1]
Pignuts generally still green on trees.
Wild pears (not seen).
Button-bush balls (now too brown for beauty).
Green-briar (condition not noticed).
Sweet-briar (some hips apparently frost-bitten!).
Bass berries mostly dry and brown September 30th.
Tupelo (not seen of late).
Bayberries (picked by birds?).

Of the above-named list, etc., those still persistent and interesting, then, are:—

* Sumach berries of different kinds.
Bunchberries where found.
Privet berries " "
* Waxwork (?).
Possibly a little poke (?).
Mountain-ash (??).
* Amphicarpæa, some time.
* Uva-ursi.
* Wild apples.
* Barberries left.
* Some thorn-apples.
* Celtis, how long?
* Prinos.
Is there any spikenard?
" " " fever-bush?[2]
" " " arum?[3]
* Cranberries, two kinds.[4]

[1] See one.
[2] Can see none the 15th.
[3] Can see none the 15th.
[4] The *Vaccinium Oxycoccus* mostly quite ripened by frost the 17th.

* Rose hips, all kinds.
* Poison-dogwood.
* *R. Toxicodendron.*
* Some fever-wort.
* Checkerberries, hardly ripe.
* Ground-nut.
Smilacina (two kinds, at least), shrivelled.
* Mitchella, fair.
* Mallows.
Asclepiases.
* Hickory-nuts.
* Green-briar (?).
* Bayberries.

Of which those starred are the only noticeable ones, and only the following probably are in their mellow prime now: —

Uva-ursi.
Wild apples.
Prinos.
Cranberries.
Rose hips.
Mitchella.
Hickory-nuts (*hardly yet*).
Bayberries.
Mallows.

Some *Rhus radicans* was leafless on the 13th, and some tupelos bare maybe a week or more, and button-bushes nearly bare.

My little white pines by Walden are now conspicuous in their rows, the grass, etc., having withered to tawny and the blackberry turned to scarlet. They have been almost inobvious through the summer. The dark evergreen leaves of the checkerberry also attract us now amid the shrub oaks, as on the southwest of Pine Hill.

I hear a man laughed at because he went to Europe twice in search of an imaginary wife who, he thought, was there, though he had never seen nor heard of her. But the majority have gone further while they stayed in America, have actually allied themselves to one whom they thought their wife and found out their mistake too late to mend it. It would be cruel to laugh at these.

Wise, the balloonist, says that he lost a balloon "in a *juniper bog* in the State of Maine," which he mistook for a "prairie." Does he mean a larch swamp?[1] Balloonists speak of hearing dogs bark at night and wagons rumbling over bridges.

Arbor-vitæ falling (seeds), how long?

Oct. 15. P. M. — To Botrychium Swamp.

A cold northwest wind.

I see some black oak acorns on the trees still and in some places at least half the shrub oak acorns. The last are handsomer now that they have turned so much darker.

I go along the east edge of Poplar Hill. This very cold and windy day, now that so many leaves have fallen, I begin to notice the silveriness of willows blown up in the wind, — a November sight.

The hickories at Poplar Hill (and elsewhere, as far as I perceive) are all past prime now and most half-withered or bare, very different from last year. In warmer autumns, if I remember rightly, they last several weeks later than this in some localities, one succeeding another with its splendid glow, an evidence of the genial-

[1] [Larch swamps are called "juniper bogs" in some parts of Maine.]

ness of the season. In cool and moist places, in a genial year, some are preserved green after others have changed, and by their later change and glow they prolong the season of autumnal tints very agreeably.

This is a cold fall.

The larches in A. Heywood's swamp, though a yellower green than the white pines, are not yet sharply distinguished from them by their form, as they will be.

The oaks generally are very fair now at a distance. Standing on this hilltop this cold and blustering day, when dark and slate-colored clouds are flitting over the sky, the beauty of the scenery is enhanced by the contrast in the short intervals of sunshine. The whole surface of the country, both young woodlands and full-grown forests, whether they clothe sides of hills or their lit tops are seen over a ridge, — the birch phalanxes and huckleberry flocks [?], etc., — even to the horizon, is like a rug of many brilliant colors, with the towns in the more open and tawny spaces. The beauty or effect of the scene is enhanced, if, standing here, you see far in the horizon the red regiments of oaks alternately lit up by the sun and dimmed by the passing shadow of a cloud. As the shadows of these cold clouds flit across the landscape, the red banners of distant forests are lit up or disappear like the colors of a thousand regiments.

Pratt says that he planted a ground-nut in his garden in good soil, but they grew no bigger than a bean. He did not know but it would take more than one year, even if he planted the tuber.

The yellow birches are generally bare. *Juniperus repens* leaves have fallen, perhaps with red cedar.

The ash trees I see to-day are quite bare, apparently several or some days.

The little leaves of the mitchella, with a whitish midrib and veins, lying generally flat on the mossy ground, perhaps about the base of a tree, with their bright-scarlet twin berries sprinkled over them, may properly be said to *checker* the ground. Now, particularly, they are noticed amid the fallen leaves.

The bayberry leaves have fallen, and all the berries are gone. I suppose the birds have eaten them. Mountain laurel leaves are fallen. The yellow birches are bare, revealing the fruit (the short, thick brown catkins) now ripe and ready to scale off. How full the trees are! About as thick as the leaves were. The fever-bush is for the most part bare, and I see no berries. *Rhus radicans* too is bare. The maidenhair is for the most part withered. It is not evergreen, then. The mountain sumach which I see is bare, and some smooth ditto.

That appears to be *Aspidium cristatum* which I find evergreen in swamps, but no fertile fronds now. It is broader and denser than the plate of the English one. It cannot be a described variety of *spinulosum*, for it is only once pinnate.

I think I see myrtle-birds on white birches, and that they are the birds I saw on them a week or two ago, — apparently, or probably, after the birch lice. See a *Fringilla hyemalis*. The chickadees sing as if at home. They are not travelling singers hired by any Barnum. Theirs is an honest, homely, heartfelt melody. Shall not the voice of man express as much content as the note of a bird?

Botrychium Lunaria has shed pollen, how long? The little larches in midst of Gowing's Swamp already changed, before others elsewhere.

Each town should have a park, or rather a primitive forest, of five hundred or a thousand acres, where a stick should never be cut for fuel, a common possession forever, for instruction and recreation. We hear of cow-commons and ministerial lots, but we want *men*-commons and lay lots, inalienable forever. Let us keep the New World *new*, preserve all the advantages of living in the country. There is meadow and pasture and wood-lot for the town's poor. Why not a forest and huckleberry-field for the town's rich? All Walden Wood might have been preserved for our park forever, with Walden in its midst, and the Easterbrooks Country, an unoccupied area of some four square miles, might have been our huckleberry-field. If any owners of these tracts are about to leave the world without natural heirs who need or deserve to be specially remembered, they will do wisely to abandon their possession to all, and not will them to some individual who perhaps has enough already. As some give to Harvard College or another institution, why might not another give a forest or huckleberry-field to Concord? A town is an institution which deserves to be remembered. We boast of our system of education, but why stop at schoolmasters and schoolhouses? We are all schoolmasters, and our schoolhouse is the universe. To attend chiefly to the desk or schoolhouse while we neglect the scenery in which it is placed is absurd. If we do not look out we shall find our fine schoolhouse standing in a cow-yard at last.

The *Kalmia glauca*, now falling, is quite a brilliant scarlet. In this case you have the fresh liquid-green leaves of this year above the brilliant scarlet ones of last year. Most other evergreens exhibit only a contrast of green with yellow or yellowish.

The balm-of-Gileads by Mrs. Ripley's bare. Those beyond Barrett's Bridge green and full of leaves. The spruce leaves have fallen, — how long? — and its seeds are falling. Larch seeds falling. Celtis berries ripe, how long? *Solanum Dulcamara* berries linger over water but mostly are shrivelled. Canoe birch is now at least half fallen or more, apparently with the small white; looks in color like an aspen.

Oct. 16. *Sunday.* P. M. — Paddle to Puffer's and thence walk to Ledum Swamp and Conant's Wood.

A cold, clear, Novemberish day. The wind goes down and we do not sail. The button-bushes are just bare, and the black willows partly so, and the mikania all fairly gray now. I see the button-bush balls reflected on each side, and each wool-grass head and recurved withered sedge or rush is also doubled by the reflection. The *Scirpus lacustris* is generally brown, the *Juncus militaris* greener. It is rather too cool to sit still in the boat unless in a sunny and sheltered place. I have not been on the river for some time, and it is the more novel to me this cool day.

When I get to Willow Bay I see the new musquash-houses erected, conspicuous on the now nearly leafless shores. To me this is an important and suggestive sight, as, perchance, in some countries new haystacks

in the yards; as to the Esquimaux the erection of winter houses. I remember this phenomenon annually for thirty years. A more constant phenomenon here than the new haystacks in the yard, for they were erected here probably before man dwelt here and may still be erected here when man has departed. For thirty years I have annually observed, about this time or earlier, the freshly erected winter lodges of the musquash along the riverside, reminding us that, if we have no gypsies, we have a more indigenous race of furry, quadrupedal men maintaining their ground in our midst still. This may not be an annual phenomenon to you. It may not be in the Greenwich almanac or ephemeris, but it has an important place in my Kalendar. So surely as the sun appears to be in Libra or Scorpio, I see the conical winter lodges of the musquash rising above the withered pontederia and flags. There will be some reference to it, by way of parable or otherwise, in *my* New Testament. Surely, it is a defect in our Bible that it is not truly ours, but a Hebrew Bible. The most pertinent illustrations for us are to be drawn, not from Egypt or Babylonia, but from New England.

Talk about learning our *letters* and being *literate!* Why, the roots of *letters* are *things*. Natural objects and phenomena are the original symbols or types which express our thoughts and feelings, and yet American scholars, having little or no root in the soil, commonly strive with all their might to confine themselves to the imported symbols alone. All the true growth and experience, the living speech, they would fain reject as

"Americanisms." It is the old error, which the church, the state, the school ever commit, choosing darkness rather than light, holding fast to the old and to tradition. A more intimate knowledge, a deeper experience, will surely originate a word. When I really know that our river pursues a serpentine course to the Merrimack, shall I continue to describe it by referring to some other river no older than itself which is like it, and call it a *meander?* It is no more *meandering* than the Meander is *musketaquidding*. As well sing of the nightingale here as the Meander. What if there were a tariff on words, on language, for the encouragement of home manufactures? Have we not the genius to coin our own? Let the schoolmaster distinguish the true from the counterfeit.

They go on publishing the "chronological cycles" and "movable festivals of the Church" and the like from mere habit, but how insignificant are these compared with the annual phenomena of your life, which fall within your experience! The signs of the zodiac are not nearly of that significance to me that the sight of a dead sucker in the spring is. That is the occasion for an *im*movable festival in my church. Another kind of Lent then begins in my thoughts than you wot of. I am satisfied then to live on fish alone for a season.

Men attach a false importance to celestial phenomena as compared with terrestrial, as if it were more respectable and elevating to watch your neighbors than to mind your own affairs. The nodes of the stars are not the knots we have to untie. The phenomena of our year are one thing, those of the almanac another.

For October, for instance, instead of making the sun enter the sign of the scorpion, I would much sooner make him enter a musquash-house. Astronomy is a fashionable study, patronized by princes, but not fungi. "Royal Astronomer." The snapping turtle, too, must find a place among the constellations, though it may have to supplant some doubtful characters already there. If there is no place for him overhead, he can serve us bravely underneath, supporting the earth.

This clear, cold, Novemberish light is inspiriting. Some twigs which are bare and weeds begin to glitter with hoary light. The very edge or outline of a tawny or russet hill has this hoary light on it. Your thoughts sparkle like the water surface and the downy twigs. From the shore you look back at the silver-plated river.

Every rain exposes new arrowheads. We stop at Clamshell and dabble for a moment in the relics of a departed race.

Where we landed in front of Puffer's, found a jug which the haymakers had left in the bushes. Hid our boat there in a clump of willows, and though the ends stuck out, being a pale green and whitish, they were not visible or distinguishable at a little distance.

Passed through the sandy potato-field at Witherell's cellar-hole. Potatoes not dug; looking late and neglected now; the very vines almost vanished on some sandier hills.

When we emerged from the pleasant footpath through the birches into Witherell Glade, looking along it toward

the westering sun, the glittering white tufts of the *Andropogon scoparius*, lit up by the sun, were affectingly fair and cheering to behold. It was already a cheerful Novemberish scene. A narrow glade stretching east and west between a dense birch wood, now half bare, and a ruddy oak wood on the upper side, a ground covered with tawny stubble and fine withered grass and cistuses. Looking westward along it, your

eye fell on these lit tufts of andropogon,[1] their glowing half raised a foot or more above the ground, a lighter and more brilliant whiteness than the downiest cloud presents (though seen on one side they are grayish).[2] Even the lespedezas stand like frost-covered wands, and now hoary goldenrods and some bright-red blackberry vines amid the tawny grass are in harmony with the rest; and if you sharpen and rightly intend your eye you see the gleaming lines of gossamer (stretching from stubble to stubble over the whole surface) which you are breaking. How cheerful these cold but bright white waving tufts! They reflect all the sun's light without a particle of his heat, or yellow rays. A thousand such tufts now catch up the sun and send to us its light but not heat. His heat is being steadily withdrawn from us. Light without heat is getting to be the prevailing phenomenon of the day now. We economize all the warmth we get now.

The frost of the 11th, which stiffened the ground, made new havoc with vegetation, as I perceive. Many

[1] *Vide* Nov. 8th.

[2] *Vide* (by chance) same date, or Oct. 16th, 1858.

plants have ceased to bloom, no doubt. Many *Diplopappus linariifolius* are gone to seed, and yellowish globes. Such are the stages in the year's decline. The flowers are at the mercy of the frosts. Places where erechthites grows, more or less bare, in sprout-lands, look quite black and white (black withered leaves and white down) and wintry.

At Ledum Swamp, feeling to find the *Vaccinium Oxycoccus* berries, I am struck with the coldness of the wet sphagnum, as if I put my hands into a moss in Labrador, — a sort of winter lingering the summer through there. To my surprise, now at 3.30 P. M., some of the sphagnum in the shade is still stiff with frost, and when I break it I see the glistening spiculæ. This is the most startling evidence of winter as yet. For only on the morning of the 11th was there any stiffening of the ground elsewhere. Also in the high sedgy sprout-land south of this swamp, I see hoary or frost-like patches of sedge amid the rest, where all is dry; as if in such places (the lowest) the frost had completely bleached the grass so that it now looks like frost. I think that that is the case.

It is remarkable how, when a wood has been cut (perhaps where the soil was light) and frosts for a long while prevent a new wood from springing up there, that fine sedge (*Carex Pennsylvanica ?*) will densely cover the ground amid the stumps and dead sprouts. It is the most hardy and native of grasses there. This is *the* grass of the sprout-lands and woods. It wants only the sun and a reasonably dry soil. Then there are the grasses and sedges of the meadows, but the cul-

tivated fields and the pastures are commonly clothed with introduced grasses.

The nesæa is all withered, also the woodwardia. The ledum and *Andromeda Polifolia* leaves have fallen. The *Kalmia glauca* is still falling. The spruce, also, has fallen.

The ledum smells like a bee, — that peculiar scent they have. C., too, perceives it.

See a hairy woodpecker on a burnt pitch pine. He distinctly rests on his tail constantly. With what vigor he taps and bores the bark, making it fly far and wide, and then darts off with a sharp whistle!

I remark how still it is to-day, really Sabbath-like. This day, at least, we do not hear the rattle of cars nor the whistle. I cannot realize that the country was often as still as this twenty years ago.

Returning, the river is perfectly still and smooth. The broad, shallow water on each side, bathing the withered grass, looks as if it were ready to put on its veil of ice at any moment. It seems positively to invite the access of frost. I seem to hear already the creaking, shivering sound of ice there, broken by the undulations my boat makes. So near are we to winter. Then, nearer home, I hear two or three song sparrows on the button-bushes sing as in spring, — that memorable tinkle, — as if it would be last as it was first.

The few blackish leaves of pontederia rising above the water now resemble ducks at a distance, and so help to conceal them now that they are returning.

The weeds are dressed in their frost jackets, naked down to their close-fitting downy or flannel shirts. Like

athletes they challenge the winter, these bare twigs. This cold refines and condenses us. Our spirits are strong, like that pint of cider in the middle of a frozen barrel.

The cool, placid, silver-plated waters at even coolly await the frost. The musquash is steadily adding to his winter lodge. There is no need of supposing a peculiar instinct telling him how high to build his cabin. He has had a longer experience in this river-valley than we. Evergreens, I should say, fall early, both the coniferous and the broad-leaved.

That election-cake fungus which is still growing (as for some months) appears to be a *Boletus*.

I love to get out of cultivated fields where I walk on an imported sod, on English grass, and walk in the fine sedge of woodland hollows, on an American sward. In the former case my thoughts are heavy and lumpish, as if I fed on turnips. In the other I nibble ground-nuts.

Your hands begin to be cool, rowing, now. At many a place in sprout-lands, where the sedge is peculiarly flat and white or hoary, I put down my hand to feel if there is frost on it. It must be the *trace* of frost. Since the frost of the 11th, the grass and stubble has received another coat of tawny.

That andropogon bright feathery top may be put with the clematis seed and tail. Only this cold, clear sky can light them up thus.

The farmer begins to calculate how much longer he can safely leave his potatoes out.

Each ball of the button-bush reflected in the silvery

water by the riverside appears to me as distinct and important as a star in the heavens viewed through "optic glass." This, too, deserves its Kepler and Galileo.

As nature generally, on the advent of frost, puts on a russet and tawny dress, so is not man clad more in harmony with nature in the fall in a tawny suit or the different hues of Vermont gray? I would fain see him glitter like a sweet-fern twig between me and the sun.

A few green yellow lily pads lie on the surface waiting to be frozen in. All the *Lycopodium complanatum* I see to-day has shed its pollen.

Oct. 17. A smart frost this morning. Ground stiffened. Hear of ice in a tub.

P. M. — To Gowing's Swamp.

The water standing over the road at Moore's Swamp, I see the sand spotted black with many thousands of little snails with a shell, and two feelers out, slowly dragging themselves over the bottom. They reminded me by their color, number, and form of the young tadpoles.

I look for *Vaccinium Oxycoccus* in the swamp. The uneven surface of the sphagnum in which the slender vine grows comes up to my idea of a mountainous country better than many actual mountains that I have seen. Labrador mountains these are at least. The higher patches of sphagnum are changed to a dark purple, which shows a crude green where you crack it by your weight. The lower parts are yet yellowish-green merely. These interesting little cranberries are quite scarce, the vine bearing (this year, at least) only amid the higher

and drier sphagnous mountains amid the lowest bushes about the edge of the open swamp. There the dark-red berries (quite ripe) now rest, on the shelves and in the recesses of the red sphagnum. There is only enough of these berries for sauce to a botanist's Thanksgiving dinner.

What I put into my pocket, whether berry or apple, generally has to keep company with an arrowhead or two. I hear the latter chinking against a key as I walk. These are the perennial crop of Concord fields. If they were sure it would pay, we should see farmers raking the fields for them.

The rain drives me from my berrying and we take shelter under a tree. It is worth the while to sit under the lee of an apple tree trunk in the rain, if only to study the bark and its inhabitants. I do not disturb the father-long-legs which to avoid the storm has merely got round to the lee side, or under the shelter of an excrescence. Thus easily insects find their roof ready for them. Man's very size compels him to build a house. Caves and recesses big enough are too rare.

Why should we not stay at home? This is the land and we are the inhabitants so many travellers come to see. Why should we suffer ourselves to drift outside and lose all our advantages? They were bold navigators once who merely sighted these shores. We were born and bred further in the land than Captain John Smith got.

I hear that ten geese went over New Bedford some days ago.

When La Mountain and Haddock dropped down in

the Canada wilderness the other day, they came near starving, or dying of cold and wet and fatigue, not knowing where to look for food nor how to shelter themselves. Thus far we have wandered from a simple and independent life. I think that a wise and independent, self-reliant man will have a complete list of the edibles to be found in a primitive country or wilderness, a bill of fare, in his waistcoat pocket at least, to say nothing of matches and warm clothing, so that he can commence a systematic search for them without loss of time. They might have had several frogs apiece if they had known how to find them. Talk about tariffs and protection of home industry, so as to be prepared for wars and hard times!! Here we are, deriving our breadstuffs from the West, our butter stuffs from Vermont, and our tea and coffee and sugar stuffs, and much more with which we stuff ourselves, from the other side of the globe. Why, a truly prudent man will carry such a list as the above, in his mind at least, even though he walk through Broadway or Quincy Market. He will know what are the permanent resources of the land and be prepared for the hardest of times. He will go behind cities and their police; he will see through them. Is not the wilderness of mould and dry-rot forever invading and threatening them? They are but a camp abundantly supplied to-day, but gnawing their old shoes to-morrow.[1]

[1] Why, a philosopher who soars higher than usual in his thoughts from time to time drops down into what is just such a wilderness to him as that was to La Mountain and Haddock, where he finds hardly one little frog gone into winter quarters to sustain him and runs screaming toward the climes of the sun.

I see all the farmers' old coats spread over the few squashes and pumpkins still left out in a pile. The arbor-vitæ sheds seeds; how long?

Oct. 18. Rains till 3 P. M., but is warmer.

P. M. — To Assabet, front of Tarbell's.

Going by Dennis Swamp on railroad, the sour scent of decaying ferns is now very strong there. *Rhus venenata* is bare, and maples and some other shrubs, and more are very thin-leaved, as alder and birches, so that the swamp, with so many fallen leaves and migrating sparrows, etc., flitting through it, has a very late look.

For falling, put the canoe birch with the small white. The beach plum is almost quite bare. The leaves of a chinquapin oak have not fallen. The long, curved, yellowish buds of the *Salix discolor* begin to show, the leaves falling; even the down has peeped out from under some.

In the ditch along the west side of Dennis Swamp I see half a dozen yellow-spot turtles moving about. Probably they are preparing to go into winter quarters.

I see one of the smaller thrushes to-day.

Saw a tree-toad on the ground in a sandy wood-path. It did not offer to hop away, may have been chilled by the rain (?). It is marked on the back with black, somewhat in the form of the hylodes.

Why can we not oftener refresh one another with original thoughts? If the fragrance of the dicksonia fern is so grateful and suggestive to us, how much more refreshing and encouraging — re-creating — would be fresh and fragrant thoughts communicated to us fresh from a man's experience and life! I want none of his

pity, nor sympathy, in the common sense, but that he should emit and communicate to me his essential fragrance, that he should not be forever repenting and going to church (when not otherwise sinning), but, as it were, going a-huckleberrying in the fields of thought, and enrich all the world with his visions and his joys.

Why do you flee so soon, sir, to the theatres, lecture-rooms, and museums of the city? If you will stay here awhile I will promise you strange sights. You shall walk on water; all these brooks and rivers and ponds shall be your highway. You shall see the whole earth covered a foot or more deep with purest white crystals, in which you slump or over which you glide, and all the trees and stubble glittering in icy armor.

Oct. 19.[1] When a government puts forth its strength on the side of injustice, as ours (especially to-day) to maintain slavery and kill the liberators of the slave, what a merely brute, or worse than brute, force it is seen to be! A demoniacal force! It is more manifest than ever that tyranny rules. I see this government to be effectually allied with France and Austria in oppressing mankind.

One comment I heard of by the postmaster of this village on the news of Brown's death:[2] "He died as the

[1] [Here begin Thoreau's notes for his first address on John Brown, delivered in Concord, Oct. 30 of this year (*Cape Cod, and Miscellanies*, pp. 409–440; *Misc.*, Riv. 197–236).]

[2] [It had been reported that Brown was killed at the time of his capture. (See *Cape Cod, and Miscellanies*, p. 417; *Misc.*, Riv. 207.) For matter in relation to Thoreau's John Brown speeches see *Familiar Letters*, pp. 358–360; Riv. 413–415.]

fool dieth." I should have answered this man, "He did not live as the fool liveth, and he died as he lived."

Treason! where does treason take its rise? I cannot help thinking of you as you deserve, ye governments. Can you dry up the fountains of thought? High treason which is resistance to *tyranny* here below has its origin in, and is first committed by, the power that makes and forever re-creates man. When you have caught and hung all of these human rebels, you have accomplished nothing but your own guilt, for you have not struck at the fountainhead. You presume to contend with a foe against whom West Point cadets and rifled cannon *point* not. Can all the arts of the cannon-founder tempt matter to turn against its Maker? Is the form in which he casts it more essential than the constitution of it and of himself?

I see that the same journal that contains this pregnant news from Harper's Ferry is chiefly filled, in parallel columns, with the reports of the political conventions that are now being held. But the descent is too steep to them; they should have been spared this contrast. To turn from the voices and deeds of earnest men to the cackling of political conventions! Office-seekers and speechmakers, who do not so much as lay an egg, but wear their breasts bare upon an egg of chalk. Their great game is the game of straws, or rather that universal and aboriginal game of the platter, at which the Indians cried, *Hub-bub.* Some of them generals forsooth.

It galls me to listen to the remarks of craven-hearted neighbors who speak disparagingly of Brown because he

resorted to violence, resisted the government, threw his life away! — what way have they thrown their lives, pray? — neighbors who would praise a man for attacking singly an ordinary band of thieves or murderers. Such minds are not equal to the occasion. They preserve the so-called peace of their community by deeds of petty violence every day. Look at the policeman's billy and handcuffs! Look at the jail! Look at the gallows! Look at the chaplain of the regiment! We are hoping only to live safely on the outskirts of *this* provisional army. So they defend themselves and our hen-roosts, and maintain slavery.

There sits a tyrant holding fettered four millions of slaves. Here comes their heroic liberator; if he falls, will he not still live?

C. says that he saw a loon at Walden the 15th.

P. M. — To Lee's Cliff.

The tupelo berries have all fallen; how long? Alternate cornel about bare. Hardhack half bare. Many witch-hazel nuts are not yet open. The bushes just bare. The slippery elm is nearly bare, like the common near it. Cedar berries, how long? 14th at least; probably by the time they lost their leaves. There is one sizable tree west by north of Lee's Cliff, near the wall. *Lycopodium dendroideum* (not variety) is just shedding pollen near this cedar. I see asparagus in the woods there near the cedar, four or five feet high!

Find the seedling archangelica grown about two feet high and still quite green and growing, though the full-grown plants are long since dead, root and stalk. This suggests that no doubt much of the radical spring green-

ness is of this character, — seedlings of biennials, and perhaps more of them a persistent or late growth from a perennial root, as crowfoot, whiteweed, five-finger, etc. The scent of the archangelica root is not agreeable to me. The scent of my fingers after having handled it reminds me strongly of the musquash and woodchuck, though the root itself does not; so its odor must be allied to theirs.

I find at Lee's Cliff, on the shelves and sides of the rocks, a new fern, apparently *Cystopteris fragilis*, more than half decayed or withered, though some fresher and shorter fronds at the base of the others are still quite green. It curls up so in my hat that I have difficulty in examining it. It is abundant thereabouts.

Paddling up the river the other day, those (probably canoe) birches on Mt. Misery on the edge of the hill a mile in front looked like little dark clouds, for [I] could not distinguish their white trunks against the sky.

Though the dark-blue, or ripe, creeping juniper berries are chiefly on the lower part of the branches, I see fresh green ones on old wood as big as a pipe-stem and often directly opposite to purple ones (!). They are strangely mixed up. I am not sure but some of this year's berries are already ripe. See a black and rusty hedgehog (?) caterpillar in the path.

The remarks of my neighbors upon Brown's death and supposed fate, with very few exceptions, are, "He is undoubtedly insane," "Died as the fool dieth," "Served him right;" and so they proceed to live their sane, and wise, and altogether admirable lives, reading their Plutarch a little, but chiefly pausing at that feat

of Putnam, who was let down into a wolf's den (that is quite the strongest pap that Young America is fed on); and so they nourish themselves for brave and patriotic deeds.

What is the character of that calm which follows when the law and the slaveholder prevail?

A government that pretends to be Christian and crucifies a million Christs every day!

Our foes are in our midst and all about us. Hardly a house but is divided against itself. For our foe is the all but universal woodenness (both of head and heart), the want of vitality, of man, — the effect of vice, — whence are begotten fear and superstition and bigotry and persecution and slavery of all kinds. Mere figure-heads upon a hulk, with livers in the place of hearts. A church that can never have done with excommunicating Christ while it exists. Our plains were overrun the other day with a flock of adjutant-generals, as if a brood of cockerels had been let loose there, waiting to use their spurs in what sort of glorious cause, I ask. What more probable in the future, what more certain heretofore, than in grinding in the dust four hundred thousands of feeble and timid men, women, and children? The United States exclaims: "Here are four millions of human creatures which we have stolen. We have abolished among them the relations of father, mother, children, wife, and we mean to keep them in this condition. Will you, O Massachusetts, help us to do so?" And Massachusetts promptly answers, "Aye!"

The cause is the worship of idols, which at length changes the worshipper into a stone image himself.

Every man worships his ideal of power and goodness, or God, and the New-Englander is just as much an idolater as the Hindoo.

The momentary charge at Balaclava, in obedience to a blundering command, — proving what a perfect machine the soldier is — has been celebrated by a poet laureate; but the steady and for the most part successful charge against the legions of Slavery kept up for some years in Kansas by John Brown in obedience to an infinitely higher command is unsung, — as much more memorable than that as an intelligent and conscientious man is superior to a machine.

The brutish, thick-skinned herd, who do not know a *man* by sympathy, make haste home from their ballot-boxes and churches to their Castles of Indolence, perchance to cherish their valor there with some nursery talk of knights and dragons. A whole nation will for ages cling to the memory of its Arthur, or other imaginary hero, who perhaps never assailed its peculiar institution or sin, and, being imaginary, never failed, when they are themselves the very freebooters and craven knights whom he routed, while they forget their real heroes.

The publishers and the various boards of woodenheads can afford to reprint that story of Putnam's. You might open the district schools with the reading of it, because there is nothing about slavery or the church in it; unless it occurs to the reader that the *pastors* are *wolves* in sheep's clothing.

I have seen no hearty approbation for this man in any Abolition journal; as if it were not consistent with

their policy to express it, or maybe they did not feel it. And as for the herd of newspapers, I do not chance to know one in the country that will deliberately print anything that will ultimately and permanently reduce the number of its subscribers. They do not believe it would be *expedient*. If we do not say pleasant things, they argue, nobody will attend to us. And so they are like some auctioneers, who sing an obscene song in order to draw a crowd around them.

Another neighbor asks, Yankee-like, "What will *he* gain by it?" as if he expected to fill his pockets by this enterprise. They have no idea of gain but in this worldly sense. If it does not lead to a surprise party, if he does not get a new pair of boots and a vote of thanks, it must be a failure. Such do not know that like the seed is the fruit, and that, in the moral world, when good seed is planted, good fruit is inevitable and does not depend on our watering and cultivating; that when you plant, or bury, a hero in this field, a crop of heroes is sure to spring up. This is a seed of such force and vitality that it does not ask our leave to germinate.

Some eighteen hundred years ago Christ was crucified; this morning, perhaps, John Brown was hung. These are the two ends of a chain which I rejoice to know is not without its links.

The Republican editors, obliged to get their sentences ready for the morning edition, — and their dinner ready before afternoon, — speak of these men, not in a tone of admiration for their disinterestedness and heroism, not of sorrow even for their fate, but calling

them "deluded fanatics," "mistaken men," "insane," or "crazed." Did it ever occur to you what a *sane* set of editors we are blessed with?—not "mistaken men;" who know very well on which side their bread is buttered!

The *noble* Republican Party is in haste to exculpate itself from all sympathy with these "misguided men." Even the very men who would rejoice if he had succeeded, though in spite of all odds, are estranged from and deny him because he failed. A "dangerous man"! All the worthies and martyrs were such dangerous men. We wish that these editors and ministers were a little more *dangerous*.

It is mentioned against him and as an evidence of his insanity, "a conscientious man, very modest in his demeanor, that he was apparently inoffensive, until the subject of slavery was introduced, when he would exhibit a feeling of indignation unparalleled." (*Boston Journal*, October 21, 1859.)

If Christ should appear on earth he would on all hands be denounced as a mistaken, misguided man, insane and crazed.

The Liberator calls it "a misguided, wild, and apparently insane . . . effort."

"The American Board of Commissioners for Foreign Missions," which have just met in Philadelphia, did not dare as a body to protest even against the foreign slave-trade, which even many domestic slave-traders are ready to do. And I hear of Northern men, women, and children by families buying a life-membership in this society. A life-membership in the grave! You can get buried cheaper than that.

He was a superior man. He did not value his bodily life in comparison with ideal things; he did not recognize unjust human laws, but resisted them, as he was bid; and now he is called insane by all who cannot appreciate such magnanimity. He needed no babbling lawyer, making false issues, to defend him. He was more than a match for all judges that American voters, or office-holders of whatever grade, can create. He could not have been tried by a jury of his peers, because his peers did not exist.

When a man stands up serenely against the condemnation and vengeance of mankind, rising above them literally by a whole body, — though he were a slave, though he were a freeman, though he were of late the vilest murderer, who has settled that matter with himself, — the spectacle is a sublime one! — did n't ye know it, ye Garrisons, ye Buchanans, ye politicians, attorney-generals? — and we become criminal in comparison. Do yourselves the honor to recognize him. *He* needs none of your respect. What though he did not belong to your clique!

I do not believe in erecting statues to those who still live in our minds and hearts, whose bones have not yet crumbled in the earth around us, but I would rather see the statue of John Brown in the Massachusetts State-House yard than that of any other man whom I know.

What a contrast, when we turn to that political party which is so anxiously shaking its skirts clean of him and his friends and looking round for some available slaveholder to be its candidate!

The evil is not merely a stagnation of blood, but a

stagnation of spirit. Of course, the mass of men, even the well-disposed but sluggish souls who are ready to abet when their conscience or sympathies are reached, cannot conceive of a man who is actuated by higher motives than they are. Accordingly they pronounce him insane, for they know that they would never act as he does as long as they are themselves.

This most hypocritical and diabolical government looks up from its seat upon four millions of gasping slaves and inquires with an assumption of innocence, "What do you assault me for? Am I not an honest man?" "Ah, sir, but your seat — your footstool — my father and mother — get off! — get off!" But there sits the incubus with all his weight, and stretching ever more and more, and for all reply answers, "Why won't you cease agitation upon this subject?"

The only government that I recognize is that power that establishes justice in the land, never that which establishes injustice. Suppose that there is a private company in Massachusetts that out of its own purse and magnanimity saves all the fugitive slaves that run to us, and protects our colored fellow-citizens, and leaves the other work to the government, so called. Is not that government fast losing its occupation and becoming contemptible to mankind? If private men are obliged to perform the offices of government, to protect the weak and dispense justice, then the government becomes only a hired man, or clerk, to perform menial or indifferent services. Of course, that is but the shadow of a government, whose existence necessitates a Vigilance Committee. But such is the character of our Northern

States generally; each has its Vigilance Committee. And, to a certain extent, these crazy governments recognize and accept this relation. They say, virtually, "We 'll be glad to work for you on these terms, only don't make a noise about it." Such a government is losing its power and respectability as surely as water runs out of a leaky vessel and is held by one that can contain it.

Oct. 20. P. M. — To Ripple Lake.

Dug some artichokes behind Alcott's, the largest about one inch in diameter. Now apparently is the time to begin to dig them, the plant being considerably frost-bitten. Tried two or three roots. The main root ran down straight about six inches and then terminated abruptly, thus: They have quite a nutty taste eaten raw.

What is that flat, spreading festuca-like grass, just killed, behind A.'s house?

As I go to Clintonia Swamp along the old cross-road, I see a large and very straggling flock of crows fly[ing] southwest from over the hill behind Bull's and contending with the strong and cold northwest wind. This is the annual phenomenon. They are on their migrations.

The beach plum is nearly bare, and so is the woodbine on the brick house. The wild red cherry by A. Brooks's Hollow is completely fallen; how long? The sand cherry in my field path is almost entirely bare. Some chinquapin is half fallen.

Scare up a yellow-legs, apparently the larger, on the

shore of Walden. It goes off with a sharp *phe phe, phe phe.*

This is the coldest day as yet; wind from the northwest. It is finger-cold as I come home, and my hands find their way to my pocket. I learn the next day that snow fell to-day in northern New York and New Hampshire, and that accounts for it. We feel the cold of it here as soon as the telegraph can inform us. La Mountain's adventure has taught us how swiftly the wind may travel to us from that quarter.

Oct. 21. P. M. — To Mason's pasture.

The brook between John Flint's house and the river is half frozen over.

The clump of mountain laurel in Mason's pasture is of a triangular form, about six rods long by a base of two and a third rods, — or seven or eight square rods, — beside some separate clumps.

It is very cold and blustering to-day. It is the breath of winter, which is encamped not far off to the north.

A great many shrub oak acorns hold on, and are a darker brown than ever.

Insane! A father and seven sons, and several more men besides, — as many, at least, as twelve disciples, — all struck with insanity at once; while the sane tyrant holds with a firmer gripe than ever his four millions of slaves, and a thousand sane editors, his abettors, are saving their country and their bacon! Just as insane as were their efforts in Kansas. Ask the tyrant who is his most dangerous foe, the sane man or the insane.

If some Captain Ingraham threatens to fire into an

Austrian vessel, we clap our hands all along the shore. It won't hit us; it won't disturb our tyranny. But let a far braver than he attack the Austria within us, we turn, we actually *fire* those same guns upon him, and cry, "Insane."

The government, its salary being insured, withdraws into the back shop, taking the Constitution with it, as farmers in the winter contrive to turn a penny by following the coopering business. When the reporter to the *Herald* (!) reports the conversation "*verbatim*," he does not know of what undying words he is made the vehicle.

Read his admirable answers to Mason and others. How they are dwarfed and defeated by the contrast! On the one side half-brutish, half-timid questioning; on the other, truth, clear as lightning, crashing into their obscene temples. They are made to stand with Pilate, and Gessler, and the Inquisition. How ineffectual their speech and action! and what a void their silence!

I speak to the stupid and timid chattels of the north, pretending to read history and their Bibles, desecrating every house and every day they breathe in! True, like the clods of the valley, they are incapable of perceiving the light, but I would fain arouse them by any stimulus to an intelligent life.

Throughout the land they, not of equal magnanimity, talk of vengeance and insanity.

Away with your broad and flat churches, and your narrow and tall churches! Take a step forward and invent a new style of outhouses. Invent a salt that will save you and defend our nostrils.

The slave-ship is on her way, crowded with its dying hundreds; a small crew of slaveholders is smothering four millions under the hatches; and yet the politician asserts that the only proper way by which deliverance is to be obtained is by "the quiet diffusion of sentiments of humanity," without any "outbreak"! And in the same breath they tell us that all is *quiet* now at Harper's Ferry. What is that that I hear cast overboard? The bodies of the dead, who have found deliverance. That is the way we are diffusing humanity, and all its sentiments with it.

Prominent and influential editors, accustomed to deal with politicians, men of an infinitely lower grade, say, in their ignorance, that he acted "on the principle of revenge." They do not know the man. They must enlarge themselves to conceive of him. I have no doubt that, if that is of any importance, the time will come when they will begin to see him as he was. They have got to conceive of a man of *ideas* and of *principle*, hard as it may be for them, and not a politician or an Indian; of a man who did not wait till he was personally interfered with or thwarted in some harmless business before he gave his life to the cause of the oppressed.

I know that there have been a few heroes in the land, but no man has ever stood up in America for the dignity of human nature so devotedly, persistently, and so effectively as this man. Ye need not trouble yourselves, Republican or any other party, to wash your skirts of him. No intelligent person will ever be convinced that he was any creature of yours. He went

and came, as he informs us, "under the auspices of John Brown, and nobody else."

Ethan Allen and Stark, though worthy soldiers in their day, were rangers in a far lower field and in a less important cause.

Insane! Do the thousands who knew him best, who have rejoiced at his deeds in Kansas and have afforded him material aid, think him insane?

It costs us nothing to be just. It enriches us infinitely to recognize greater qualities than we possess in another. We can at least express our sympathy with, and admiration for, John Brown and his companions, and this is what I now propose to do.

What has Massachusetts and the North sent a few *sane* senators to Congress for of late years? — to declare with effect what kind of sentiments? All their speeches put together and boiled down — and probably they themselves will allow it — do not match for simple and manly directness, force, and effectiveness the few casual remarks of *insane* John Brown on the floor of the Harper's Ferry engine-house. To be sure, he was not our representative. He is too fair a specimen of a man to represent the like of us. In his case there is no idle eloquence, no *made* speech. Truth is his inspirer, and earnestness his critic and polisher of his sentences. He could afford to lose his Sharp's rifles, while he retained his faculty of speech, — a Sharp's rifle of infinitely surer and longer range.

"But he won't gain anything." Well, no! I don't suppose he could get four-and-sixpence a day for being hung, take the year round. But then he stands a chance

to save a considerable part of his soul, — and such a soul! — when you do not. No doubt you can get more in your market for a quart of milk than for a quart of blood, but that is not the market that heroes carry their blood to.

So ye write in your easy-chairs, and thus he, wounded, responds from the floor of the Harper's Ferry engine-house: "No man sent me here; it was my own prompting and that of my Maker. I acknowledge no master in human form."

And in what a sweet, kindly strain he proceeds, addressing those who held him prisoner: "I think, my friends, you are guilty of a great wrong against God and humanity, and it would be perfectly right for any one to interfere with you so far as to free those you willfully and wickedly hold in bondage."

And, referring to his movement: "It is, in my opinion, the greatest service a man can render to God!"

"I pity the poor in bondage that have none to help them; that is why I am here; not to gratify any personal animosity, revenge, or vindictive spirit. It is my sympathy with the oppressed and the wronged, that are as good as you, and as precious in the sight of God."

"I want you to understand that I respect the rights of the poorest and weakest of colored people, oppressed by the slave system, just as much as I do those of the most wealthy and powerful."

Thus the *insane* man preaches, while the representatives of so-called Christians (I refer to the Board of Commissioners for Foreign Missions), who pretend to

be interested in the heathen, dare not so much as protest against the foreign slave-trade!

"I wish to say, furthermore, that you had better, all you people at the South, prepare yourselves for a settlement of that question, that must come up for settlement sooner than you are prepared for it. The sooner you are prepared the better. You may dispose of me very easily. I am nearly disposed of now; but this question is still to be settled, — this negro question, I mean; the end of that is not yet."

You will perceive that not a single forcible or noticeable word is uttered by his questioners; they stand there the helpless tools in this great work. It was no human power that gathered them about this preacher.

What should we think of the Oriental Cadi behind whom worked in secret a Vigilance Committee? What shall we think of a government to which all the truly brave and just men in the land are enemies, standing between it and those whom it oppresses? Do not we Protestants know the likeness of Luther, Fox, Bunyan, when we see it? Shall we still be put to bed with our story-books, not knowing day from night?

We talk about a *representative* government, but what a monster of a government is that where the noblest faculties of the mind and the *whole* heart are not represented. A semihuman tiger or ox stalking over the earth, with its heart taken out and the top of its brain shot away.

In California and Oregon, if not nearer home, it is common to treat men exactly like deer which are hunted, and I read from time to time in Christian newspapers

how many "bucks," that is, Indian men, their sportsmen have killed.

Who is here so base, that would be a bondman? Who is here so vile, that will not love his country? If any, speak; for him have I offended. I pause for a reply.

We dream of foreign countries, of other times and races of men, placing them at a distance in history or in space; but let some significant event like the present occur in our midst, and we discover, often, this distance and this strangeness between us and our nearest neighbors. *They* are our Austrias, and Chinas, and South Sea Islands. Our crowded society becomes well spaced all at once, clean and handsome to the eye, — a city of magnificent distances. We discover why it was that we never got beyond compliments and surfaces with them before; we become aware of as many versts between us and them as there are between a wandering Tartar or Pawnee and a Chinese or American town. The thoughtful man becomes a hermit in the thoroughfares of the market-place. Impassable seas suddenly find their level between us, or dumb steppes stretch themselves out there.

I do not complain of any tactics that are effective of good, whether one wields the quill or the sword, but I shall not think him mistaken who quickest succeeds to liberate the slave. I will judge of the tactics by the fruits.

It is the difference of constitution, of intelligence, and faith, and not streams and mountains, that makes the true and impassable boundaries between individuals and

states. None but the like-minded can come plenipotentiary to our court.

They who are continually shocked by slavery have some right to be shocked by the violent death of the slaveholder, but no others. Such will be more shocked by his life than by his death.

Oct. 22. P. M. — To Cliffs and Fair Haven.

I am surprised to find in the field behind the top of the Cliffs a little vetch still perfectly fresh and *blooming*, where Wheeler had grain a year or two since, with numerous little plump pods four or five eighths of an inch long and commonly four roundish seeds to each. It must be, I think, Gray's *Vicia tetrasperma*, though he makes that have white flowers (apparently same as Bigelow's *V. pusilla*, also made to have white flowers, but Dewey calls them "bluish white"), while these are purple. Otherwise it corresponds.

A marsh hawk sails over Fair Haven Hill. In the wood-path below the Cliffs I see perfectly fresh and fair *Viola pedata* flowers, as in the spring, though but few together. No flower by its second blooming more perfectly brings back the spring to us.

In my blustering walk over the Mason and Hunt pastures yesterday, I saw much of the withered indigo-weed which was broken off and blowing about, and the seeds in its numerous black pods rattling like the rattlepod though not nearly so loud.

The very surface of the earth itself has been rapidly imbrowned of late, like the acorns in their cups, in consequence of cold and frost; and the evergreens and few

deciduous plants which are slow to wither, like Jersey tea, are more and more distinct.

F. hyemalis quite common for a week past.

One would say that the modern Christian was a man who had consented to say all the prayers in their liturgy, provided you would let him go straight to bed and sleep quietly afterward. All his prayers begin with "Now I lay me down to sleep." He has consented to perform certain old-established charities, too, after a fashion, but he does n't wish to hear of any new-fangled ones; he does n't want to have any codicils added to the contract, to fit it to the present time, — unexpected demands made on him, after he has said his prayers. He shows the whites of his eyes on the Sabbath and the blacks all the rest of the week.

It was evidently far from being a wild and desperate and insane attempt. It was a well-matured plan.

The very fact that he had no rabble or troop of hirelings about him would alone distinguish him from ordinary heroes. His company was small indeed, because few could be found worthy to pass muster. He would have no rowdy or swaggerer, no profane swearer, for, as he said, he always found these men to fail at last. He would have only men of principle, and they are few. When it was observed that if he had had a chaplain his would have been a perfect Cromwellian company, he said that he would have had a chaplain if he could [have] found one who could perform that service suitably.

Each one who there laid down his life for the poor and oppressed was thus a picked man, culled out of many

thousands, if not millions; a man of principle, of rare courage, and of devoted humanity; ready to lay down their lives any moment for the weak and enslaved. It may be doubted if there were any more their equals in all the land, for their leader scoured the land far and wide, seeking to swell his troop. These alone stood forward, prepared to step between the oppressor and the oppressed. Surely they were the very best men you could select to be hung. That was the greatest compliment this country could pay them. They were ripe for the gallows.

I regard this event as a touchstone designed to bring out with glaring distinctness the character of this government.

A man of Spartan habits, who at sixty has scruples about his diet at your table, must eat sparingly and fare hard, as becomes a soldier, he says, and one who is ever fitting himself for difficult enterprises.

A man of rare common sense and directness of speech, as of action; a Transcendentalist above all, a man of ideals and principles, — that was what distinguished him. Of unwavering purposes, not to be dissuaded but by an experience and wisdom greater than his own. Not yielding to a whim or transient impulse, but carrying out the purpose of a life.

He did not go to the college called Harvard; he was not fed on the pap that is there furnished. As he phrased it, "I know no more of grammar than one of your calves." But he went to the great university of the West, where he sedulously pursued the study of Liberty, for which he had early betrayed a fondness,

and, having taken many degrees, he finally commenced the practice of Humanity, as you all know.

I see now that it was necessary that the bravest and humanest man in all the country should be hung. Perhaps he saw it himself. If any leniency were shown him, any compromise made with him, any treating with him at all, by the government, he might be suspected.

We needed to be thus assisted to see our government by the light of history. It needed to see itself.

Compare the platform of any or all of the political parties, which deem themselves sane, with the platform on which he lay and uttered these things!!

I foresee the time when the painter will paint that scene, the poet will sing it, the historian record it, and, with the Landing of the Pilgrims and the Declaration of Independence, it will be the ornament of some future national gallery, when the present form of slavery shall be no more. We shall then be at liberty to weep for John Brown. Then and not till then we will take our revenge.

I rejoice that I live in this age, that I was his contemporary.

When I consider the spectacle of himself, and his six sons, and his son-in-law, enlisted for this fight, proceeding coolly, reverently, humanely to work, while almost all America stood ranked on the other side, I say again that it affects me as a sublime spectacle. For months if not years, sleeping and waking upon it, summering and wintering the thought, without expecting any reward but a good conscience and the gratitude of those made free.

If he had had any journal advocating "his cause," it would have been fatal to his efficiency, — any "organ," as the phrase is, monotonously and wearisomely playing that same old tune, and then passing round the hat. If he had acted in any way so as to gain the respect or toleration of the government, he might have been suspected. It was the fact that the tyrant must give place to him, or he to the tyrant, that distinguished him from all other reformers that I know.

For once the Sharp's rifle and the revolver were employed in a righteous cause. The tools were in the hands of one who could use them. I know that the mass of my neighbors think that the only righteous use that can be made of them is to fight duels with them when we are insulted by other nations, or hunt Indians, or shoot fugitive slaves with them.

Talk of political parties and their platforms! he could not have any platform but that of the Harper's Ferry engine-house.

I am aware that I anticipate a little, — that he was still, at the last accounts, alive in the hands of his foes; but that being the case, I find myself most naturally thinking and speaking of him as physically dead.

The same indignation that cleared the temple once will clear it again. The question is not about the weapon, but the spirit in which you use it. No man has appeared in America as yet who loved his fellow-man so well and treated him so tenderly. He lived for him; he took up his life and he laid it down for him.

Though you may not approve of his methods or his

principles, cease to call names, to cry mad dog. The method is nothing; the spirit is all in all. It is the deed, the devotion, the soul of the man. For you this is at present a question of magnanimity. If the schoolboy, forgetting himself, rushed to the rescue of his drowning playmate, what though he knock down somebody on his way, what though he does not go to the same church with you, or his father belong to the same political party! Would you not like to claim kindred with him in this, though in no other thing he is like, or likely, to you?

Heroes have fought well on their stumps when their legs were shot off, but I never heard of any good done by a government that had no heart, or at least had not brains of a high order.

This is not the time to hear what Tom, Dick, or Harry is doing, or in such a case would have done. We shall have time enough to find that out in, if we do not know it already. We ask you to the extent of your ability to appreciate *this man* and *his deed*, in spite of the difference between you and him. Who cares whether he belonged to your clique, or party, or sect, or not?

A man does a brave and humane deed, and at once, on all sides, we hear people and parties declaring: "I didn't do it, nor countenance *him* to do it, in any conceivable way. It can't fairly be inferred from my past career." Now, I am not interested to hear you define your position. I don't know that I ever was, or ever shall be. I am not now, at any rate. I think [it] is mere egotism, and impertinent.

On the whole my respect for my fellow-men, except

as one may outweigh a million, is not being increased these days. I have noticed the cold-blooded way in which newspaper-writers and men generally speak of this event, as if an ordinary malefactor, though one of unusual pluck, — as the Governor of Virginia says, using the language of the cockpit, "the *gamest* man he ever saw," — had been caught and were about to be hung. He was not dreaming of his foes when the Governor thought he looked so brave.

Think of him, — of his rare qualities! — such a man as it takes ages to make, and ages to understand; no mock hero, not the representative of any party. A man such as the sun may never rise upon again in this benighted land, to whose making went the costliest material, the finest adamant, the purest gold; sent to be the redeemer of those in captivity; — and the only use to which you can put him, after mature deliberation, is to hang him at the end of a rope. I need not describe him. He has stood where I now stand; you have all seen him. You who pretend to care for Christ crucified, consider what you are about to do to him who offered himself to be the savior of four millions of men!

I wish to correct the tone and some of the statements of the newspapers respecting the life and character and last action of John Brown. The newspapers seem to ignore, or perhaps they are really ignorant of, the fact that there are at least as many as one or two individuals to a town throughout the North who think much as I do about him and his enterprise. I do not hesitate to assert that they are an important and growing party.

I speak for the slave when I say that I prefer the philanthropy of John Brown to that philanthropy which neither shoots me nor liberates me.

Talk of failure and throwing his life away! he is not dead yet in any sense, and if he were dead he would still live. Were the battles of Black Jack and Ossawatomie and many encounters of less note useless and a failure? I think that it was he more than any other who made Kansas as free as she is, who taught the slaveholder that it was not safe for him to carry his slaves thither. None of the political parties have ever accomplished anything of the sort. It was he who taught Missouri that it was not profitable to hold slaves in that neighborhood. Was it a failure to deliver from bondage thirteen human beings and walk off with them by broad daylight, for weeks if not months, at a leisurely pace, through one State after another, for half the length of the North, conspicuous to all parties, with a price set upon his head, going into a court-room on his way and telling what he had done? To face singly in his work of righteousness the whole power of this unrighteous government, and successfully too! Who has gained the most ground within five years, — Brown or the Slave Power?

And this, not because the government was lenient, but because none of its menials dared to touch him. They counted the cost and concluded that a thousand dollars was not enough.

There are a few — there are more than you suppose — who cannot help thinking of that man now in the clutches of the enraged slaveholder.

He is one of that class of whom we hear a great deal, but, for the most part, see nothing at all, — the Puritans. It is in vain to kill him. He died lately in the time of Cromwell, but he reappeared here. Why should he not? Some of the Puritan stock are said to have come over and settled in New England. They were a class that did something else than celebrate their forefathers' day and eat parched corn in remembrance of their ancestors. They were neither Democrats nor Republicans. They were men of simple habits, straightforward, prayerful; not thinking much of rulers who did not fear God, not making many compromises, or seeking after available candidates.

He is of the same age with the century. He is what is called a thin and wiry-looking man, being composed of nerves instead of flesh, some five feet nine or ten inches high, with a sharp eye, and the last time he was hereabouts wore a long white beard; with a very soldier-like bearing.

I understand his grandfather was an officer in the Revolution; that he himself was born in Connecticut, but early went to Ohio with his father. His father was a contractor who furnished beef to the army there in the last war, and young Brown, accompanying his father to the camp and assisting him in his employment, saw considerable of military life, — more perhaps than he would if he had been a soldier, for he was sometimes present at the councils of the officers. He saw enough, at any rate, to disgust him with war and excite in him a great abhorrence of it; so much so that, though he was offered some petty office in the army, he not

only refused it, but also refused to train when he was warned, and was fined for it. He was then about eighteen. He said that few persons had any conception of the cost, even the pecuniary cost, of firing a single bullet in war. Above all, he learned by experience how armies were collected, supplied, and maintained in the field for a length of time, — a work which required at least as much experience and skill as to lead them in battle. And he then resolved that he would never have anything to do with war, unless it were a war for liberty. I should say that he was an old-fashioned man in his respect for the Constitution and the Declaration of Independence, and his faith in the permanence of this Union. Slavery he saw to be wholly opposed to all of these, and he was its determined foe.

When the troubles first broke out in Kansas, he sent several of his sons thither to strengthen the party of the Free State men, fitting them out with such weapons as he had, telling them if the troubles should increase, and there should be need of him, he should follow, to assist them with his hand and counsel. It was not long before he felt it to be his duty to give the Free State men of Kansas, who had no leader of experience, the benefit of what experience he had had.

At a time when scarcely a man from the Free States was able to reach Kansas by any direct route, at least without having his arms taken from him, he, carrying what imperfect firelocks and other weapons he could collect, openly drove an ox-cart through Missouri, with his surveyor's compass exposed in it, and, passing for a simple surveyor, who by his very profession must

be neutral, he met with no resistance and in the course of his leisurely journey became thoroughly acquainted with the plans of the Border Ruffians. For some time after his arrival he pursued, before he was known, similar tactics. When, for instance, he saw a knot of the Ruffians on the prairie, discussing, of course, the single topic that then occupied their minds, he would take his compass and one of his sons, and perhaps proceed to run an imaginary line which passed through the very spot on which that conclave had assembled, and then of course he would have some talk with them, learn their news and their plans, and when he had heard all they had to impart, he would resume his surveying, and run on his line till he was out of sight. This is enough to show that his plans were not crazily laid.

For a good part of his life he was a surveyor, part of the time, I think, in Illinois. At one time he was engaged in wool-growing, and went to Europe once as the agent of some wool-growers; and there too he carried his common sense with him. I have been told, for instance, that he made such a remark as this, — that he saw why the soil of England was so rich and that of Germany (or a part of it at least) so exhausted, and he thought of writing to some of the crowned heads about it. It was because in England the peasantry lived on the soil which they cultivated, while in Germany they were gathered into villages at night. It would be worth the while to have collected all the remarks of such a traveller.

Of course, he is not so foolish as to ask or expect

any favors from the government, nor probably will his friends for him.

No wonder it struck the politicians and preachers generally very forcibly that either he was insane or they, and they, being the painters, or judges, this time, decided, naturally enough, that it must be he. Such, however, as far as I learn, has not been nor is likely to be the decision of those who have recently stood face to face to him and who are now about to hang him. They have not condescended to such insult. The slaveholders and the slaves who have really dealt with him are not likely sincerely to question his sanity, but rather political or religious parties, who stand further off from a living man.

I almost fear to hear of his deliverance, doubting if a prolonged life, if any life, can do as much good as his death.

No doubt many of you have seen the little manuscript book which he carried about him, during the Kansas troubles, — his "orderly book," as I think he called it, — containing the names of his small company, a score at most, and half of them his own family, and the rules which bound them together, — a contract which many of them have sealed with their blood. There was one rule, as I remember, which prohibited prophane swearing in his camp.

I believe that he never was able to find more than a score or so of recruits whom he would accept, and only ten or a dozen in whom he had perfect faith.

Perhaps anxious politicians may prove that only seventeen white men and five negroes were concerned

in this enterprise, but the anxiety to prove this might suggest to themselves that all is not told. Why do they still dodge the truth? Do they not realize why they are so anxious? It is because of a dim consciousness of the fact, which they do not distinctly face, that at least five millions of the inhabitants of the United States who were not pining to attempt, would have rejoiced if it had succeeded. They at most only criticise the tactics.

He said that if any man offered himself to be a soldier under him who was forward to tell what he could or would do if he could only get sight of the enemy, he had but little confidence in him.

One writer says, I know not with what motive, that it is a fact "illustrative of Brown's insanity, that he has charts of nearly all the great battle-fields of Europe." I fear that his collection is not to be compared for completeness with that which this government possesses, however his sanity may be compared with its, though it did not make them itself, but there are two or three fields in Kansas of which he did not need to make any chart.

At any rate, I do not think it is sane to spend one's whole life talking or writing about this matter, and I have not done so. A man may have other affairs to attend to.

The murderer always knows that he is justly punished; but when a government takes the life of a man without the consent of his conscience, it is an audacious government, and is taking a step toward its own dissolution. Is it not possible that an individual may be right and a government wrong? Are laws to be enforced

simply because they were made, and declared by any number of men to be good, when they are *not* good? Is there any necessity for a man's being a tool to perform a deed of which he disapproves? Is it the intention of lawmakers that good men shall be hung ever? Are judges to interpret the law according to the letter, and not the spirit? Who is it whose safety requires that Captain Brown be hung? Is it indispensable to any Northern man? If you do not wish it, say so distinctly. What right have you to enter into a compact with yourself (even) that you *will* do thus or so, against your better nature? Is it for *you* to *make up* your mind, — to *form* any resolution whatever, — and not accept the convictions that are forced upon you, and which even pass your *understanding?*

Any man knows when he is justified, and not all the wits in the world can enlighten him on that point.

I do not believe in lawyers, — in that mode of defending or attacking a man,— because you descend to meet the judge on his own ground, and, in cases of the highest importance, it is of no consequence whether a man breaks a human law or not. Let lawyers decide trivial cases. If they were interpreters of the everlasting laws which rightfully bind man, that would be another thing.

Just as we are doing away with duelling or fighting one another with pistols, I think that we may in course of time do away with fighting one another with lawyers. Such improvements are not altogether unheard of. A counterfeiting law-factory, standing half in a slave land and half in a free! What kind of laws for freemen can

you expect from that? Substantial justice!! There 's nothing substantial about it, but the Judge's salary and the lawyer's fee.

The thought of that man's position and probable fate is spoiling many a man's day here at the North for other thinking. We do not think of buying any crape this time.

It seems that one of his abettors had lived there for years, and Brown took all his measures deliberately. The country was mountainous, and it was given out that they were concerned in mining operations, and to play this part required very little invention on his part, such had been his previous pursuits and habits. Having been a surveyor, he would not make a strange figure in the fields and woods; this, too, would account [for] quantities of spades and pickaxes, and strangers from time to time visiting and conferring with him in a somewhat mysterious manner.

I have no respect for the judgment of any man who can read the report of that conversation and still call the principal *insane*. It has the ring of a saner sanity than an ordinary discipline and habits of life, than an ordinary organization, secures. Take any sentence of it, — "Any questions that I can honorably answer, I will; not otherwise. So far as I am myself concerned, I have told everything truthfully. I value my word, sir."

He never overstated anything, but spoke within bounds. I remember particularly how, in his speech here, he referred to what his family had suffered in Kansas, never giving the least vent to his pent-up fire. It was a volcano with an ordinary chimney-flue. Also,

referring to the deeds of certain Border Ruffians, he said, rapidly paring away his speech, like an experienced soldier keeping a reserve of force and meaning, "They had a perfect right to be hung."

I would fain do my best to correct, etc., little as I know of him.

But I believe, without having any outward evidence, that many have already silently retracted their words.

They (Allen and Stark) may have possessed some of his love of liberty, indignation, and courage to face their country's foes, but they had not the rare qualities — the peculiar courage and self-reliance — which could enable them to face their country itself, and all mankind, in behalf of the oppressed.

He could give you information on various subjects, for he had travelled widely and observed closely. He said that the Indians with whom he dealt in Kansas were perhaps the richest people in a pecuniary sense on the earth. The money that this government annually paid them gave so much to each member of the community. They were, moreover, more intelligent than the mass of the Border Ruffians, or that class of the inhabitants of Missouri.

Much of the time of late years he has had to skulk in the swamps of Kansas with a price set upon his head, suffering from sickness and poverty and exposure, befriended only by Indians and [a] few white men. When surprise was expressed that he was not taken, he accounted for it by saying that it was perfectly well understood that he would not be taken alive. He would even show himself openly in towns which were half

composed of Border Ruffians, and transact some business, without delaying long, and yet nobody attempted to arrest [him], because, as he said, a small party did not like to undertake it, and a large one could not be got together in season.

I thought the same of his speech which I heard some years ago, — that he was not in the least a rhetorician, was not talking to Buncombe or his constituents anywhere, who had no need to invent anything, but to tell the simple truth and communicate his resolution. Therefore he appeared incomparably strong, and eloquence in Congress or elsewhere was at a discount. It was like the speeches of Cromwell compared with those of an ordinary king.

They have tried a long time; they have hung a good many, but never found the right one before.

Dispersing the sentiments of humanity! As if they were ever found unaccompanied by its deeds! as if you could disperse them as easily as water with a watering-pot and they were good only to lay the dust with!

A few ministers are doing their duty in New York. This use of the word "insane" has got to be a mere trope.

Newspaper-editors talk as if it were impossible that a man could be "divinely appointed" in these days to do any work whatever, as if vows and religion were out of date as connected with any man's daily work, and as if a man's death were a failure and his continued life, be it of whatever character, were a success. They argue that it is a proof of his *insanity* that he thought he was appointed to do this work which he did, — that he did not suspect himself for a moment!

If they do not mean this, then they do not speak the truth and say what they mean. They are simply at their old tricks still.

He said truly that the reason why such greatly superior numbers quailed before him with a handful of men only was, as some of his prisoners stated, that the former *lacked a cause*, — a kind of armor which he and his party never lacked. He said that when the time arrived, few men were found willing to lay down their lives in defense of what they knew to be wrong. They did not like that this should be their last act in this world.

As if the agent to abolish slavery could only be somebody "appointed" by the President or some political party.

All this — his insanity (monomania, says one), etc. — made him to be "dreaded by the Missourians as a supernatural being." Sure enough, a hero in the midst of us cowards is always so dreaded. He is just that thing. He shows himself superior to nature. He has a spark of divinity in him.

> "Unless above himself he can
> Erect himself, how poor a thing is man!"

I have read all the newspapers I could get within a week, and I do not remember in them a single expression of sympathy for these men.

Most of them decided not to print the full report of Brown's words in the armory "to the exclusion of other matter." Why, they have *matterated*, and there is no safety for them but in excluding the dead part and

giving place to the living and healthy. But I object not so much to what they have not done as to what they have done.

He was by descent and birth a New England farmer, a man of great common sense, deliberate and practical as that class, and tenfold more so. He was like the best of those who stood at our bridge once, on Lexington Common, and on Bunker Hill, only he was firmer and higher-principled than any that I chance to have heard of as there. It was no Abolition lecturer that converted him.

A Western paper says, to account for his escape from so many perils, that he was concealed under a "rural exterior," as if in that prairie land a hero should by good rights wear a citizen's dress only. It would appear from published letters that the women of the land are where the men should be. What sort of violence is that which is encouraged not by soldiers but by citizens, not so much by laymen as by ministers of the Gospel, not so much by the fighting sects as by Quakers, and not so much by Quaker men as Quaker women? The enemy may well "quake" at the thought of it. Is not that a righteous war where the best are thus opposed to the worst?

Governor Wise speaks far more justly and admiringly of him than any Northern editor that I have heard of. "They are themselves mistaken who take him to be a madman. . . . He is cool, collected, and indomitable, and it is but just to him to say that he was humane to his prisoners. . . . And he inspired me with great trust in his integrity as a man of truth. He is a

fanatic, vain and garrulous (!!), but firm, truthful, and intelligent. His men, too, who survive, are like him. . . . Colonel Washington says that he was the coolest and firmest man he ever saw in defying danger and death. With one son dead by his side, and another shot through, he felt the pulse of his dying son with one hand, and held his rifle with the other, and commanded his men with the utmost composure, encouraging them to be firm, and to sell their lives as dear as they could. Of the three white prisoners, Brown, Stevens, and Coppoc, it was hard to say which was the most firm." There is another man with whom the South and a good part of the North heartily sympathize. His name is Walker.

I subscribed a trifle when he was here three years ago, I had so much confidence in the man, — that he would do right, — but it would seem that he had not confidence enough in me, nor in anybody else that I know, to communicate his plans to us.

I do not wish to kill or to be killed, but I can foresee circumstances in which both of these things would be by me unavoidable. In extremities I could even be killed.

This event advertises me that there is such a fact as death, — the possibility of a man's dying. It seems as if no man had ever died in America; for in order to die you must first have lived. I don't believe in the hearses and palls and funerals that they have had. There was no death in the case, because there had been no life; they merely rotted or sloughed off, pretty much as they had rotted or sloughed along. No temple's veil was rent,

only a hole dug somewhere. The best of them fairly ran down like a clock. I hear a good many pretend that they are going to die; or that they have died, for aught I know. Nonsense! I'll defy them to do it. They have n't got life enough in them. They 'll deliquesce like fungi, and keep a hundred eulogists mopping the spot where they left off. Only half a dozen or so have died since the world began. *Memento mori!* they don't understand that sublime sentence which some worthy got sculptured on his gravestone once. They 've understood it in a grovelling and snivelling sense. They 've wholly forgotten how to die. Be sure you die. Finish your work. Know when to leave off. Men make a needless ado about taking lives, — capital punishment. Where is there any life to take? You don't know what it means to let the dead bury the dead.

Beauty stands veiled the while, and music is a screeching lie.

These men, in teaching us how to die, have at the same time taught us how to live. If this man's acts and words do not create a revival, it will be the severest possible satire on the acts and words of those who are said to have effected such things.

Do you ever think you have died, or are going to die, sir? No! there is no hope of you, sir. You have n't got your lesson yet. You 've got to stay after school.

It is the best news that America has ever heard.

Franklin, — Washington, — they were let off without dying; these were merely missing one day.

It has already quickened the public pulse of the North; it has infused more, and more generous, blood

into her veins and heart than any number of years of what is called commercial and political prosperity could. How many a man who was lately contemplating suicide has now something to live for!

Mr. Giddings says of them that "their sad fate will occupy a brief page in the history of our nation." Does he think that the history of the Republican Party — hitherto, for it may be re-created by his death — will be in the proportion of a sentence to that page?

When I reflect to what a cause this man devoted himself, and how religiously, and then reflect to what cause his judges and all who condemn him so angrily and fluently devote themselves, I see that they are as far apart as the heavens and earth are asunder. The amount of it is our "leading men" are a harmless kind of folk, and they know well enough that *they* were not divinely appointed, but elected by the votes of their party.

The most sensible of the apparently editorial articles on this event that I have met with is in the *Wheeling Intelligence*. *Vide* Supplement to Journal, October 29th.[1]

Swamp-pink and waxwork were bare October 23d; how long?

Oct. 28. Goldenrods and asters have been altogether *lingering* some days. Walnuts commonly fall, and the black walnuts at Smith's are at least half fallen.

[1] [This "supplement" does not appear among the manuscript volumes of the journal.]

They are of the form and size of a small lemon and — what is singular — have a rich nutmeg fragrance. They are now turning dark-brown. Gray says it is rare in the Eastern but very common in the Western States. Is it indigenous in Massachusetts?[1] If so, it is much the most remarkable nut that we have.

[1] Emerson says it is, but rare.

IX

NOVEMBER, 1859

(ÆT. 42)

Nov. 5. In Boston. — The first Indian-summer day, after an unusually cold October. Sat at the end of Long Wharf for coolness, but it was very warm, with scarcely a breath of wind, and so thick a haze that I could see but little way down the harbor.

Nov. 6. The river is quite low, about four inches lower than the hub [?] I used in the summer, or lower than before, this year. Yet there is more water in the mill-streams; the mill-wheels are supplied now which were stationary in the summer.

C. thinks that he saw bats last evening.

Nov. 8. A pleasant day.

P. M. — To Nut Meadow and Fair Haven Hill.

I hear a small z-ing cricket.

Coombs says that quite a little flock of pigeons bred here last summer. He found one nest in a small white pine near his pigeon-stand (where he baited them in the summer), so low he could put his hand in it (!?). I saw, while talking with him, a trout playing about in the open roadside watering-place, on the Jimmy Miles road (*i. e.* in Nut Meadow Brook), which was apparently fifteen inches long; not lurking under the bank but openly swimming up and down in midstream.

How richly and exuberantly downy are many golden-rod and aster heads now, their seed just on the point of falling or being blown away, before they are in the least weather-beaten! They are now puffed up to their utmost, clean and light.[1]

The tufts of purplish withered andropogon in Witherell Glade are still as fair as ever, soft and trembling and bending from the wind; of a very light mouse-color seen from the side of the sun, and as delicate as the most fragile ornaments of a lady's bonnet; but looking toward the sun they are a brilliant white, each polished hair (of the pappus?) reflecting the November sun without its heats, not in the least yellowish or brown like the goldenrods and asters.

Nov. 9. A fine Indian-summer day. Have had pleasant weather about a week.[2]

Nov. 10. Rain; warm.

Nov. 11. Windy and cooler.

I observed, October 23d, wood turtles copulating in the Assabet, and a flock of goldfinches on the top of a hemlock, — as if after its seeds?

Also, October 24th, riding home from Acton, I saw the withered leaves blown from an oak by the roadside dashing off, gyrating, and surging upward into the air, so exactly like a flock of birds sporting with one another that, for a minute at least, I could not be sure they were

[1] *Vide* back, Oct. 16th.

[2] *Vide* Nov. 1st.

not birds; and it suggested how far the motions of birds, like those of these leaves, might be determined by currents of air, *i. e.*, how far the bird learns to conform to such currents.

The flat variety of *Lycopodium dendroideum* shed pollen on the 25th of October. That 's a lycopodium path on north side of Colburn Hill.

Nov. 12. The first sprinkling of snow, which for a short time whitens the ground in spots.

I do not know how to distinguish between our waking life and a dream. Are we not always living the life that we imagine we are? Fear creates danger, and courage dispels it.

There was a remarkable sunset, I think the 25th of October. The sunset sky reached quite from west to east, and it was the most varied in its forms and colors of any that I remember to have seen. At one time the clouds were most softly and delicately rippled, like the ripple-marks on sand. But it was hard for me to see its beauty then, when my mind was filled with Captain Brown. So great a wrong as his fate implied overshadowed all beauty in the world.

Nov. 15. A very pleasant Indian-summer day.

P. M. — To Ledum Swamp.

I look up the river from the railroad bridge. It is perfectly smooth between the uniformly tawny meadows, and I see several musquash-cabins off Hubbard Shore distinctly outlined as usual in the November light.

I hear in several places a faint cricket note, either a fine z-ing or a distincter creak, also see and hear a grasshopper's crackling flight.

The clouds were never more fairly reflected in the water than now, as I look up the Cyanean Reach from Clamshell.

A fine gossamer is streaming from every fence and tree and stubble, though a careless observer would not notice it. As I look along over the grass toward the sun at Hosmer's field, beyond Lupine Hill, I notice the shimmering effect of the gossamer, — which seems to cover it almost like a web, — occasioned by its motion, though the air is so still. This is noticed at least forty rods off.

I turn down Witherell Glade, only that I may bring its tufts of andropogon between me and the sun for a moment. They are pretty as ever.[1]

In the midst of Ledum Swamp I came upon a white cat under the spruces and the water brush, which evidently had not seen me till I was within ten feet. There she stood, quite still, as if hoping to be concealed, only turning her head slowly away from and toward me, looking at me thus two or three times with an extremely worried expression in her eyes, but not moving any other part of her body. It occurred to me from her peculiar anxious expression and this motion, as if spellbound, that perhaps she was deaf; but when I moved toward her she found the use of her limbs and dashed off, bounding over the andromeda by successive leaps like a rabbit, no longer making her way through or beneath it.

[1] *Vide* Oct. 16th and Nov. 8th.

I noticed on the 3d, in Worcester,[1] that the white pines had been as full of seed there as here this year. Also gathered half a pocketful of shagbarks, of which many still hung on the trees though most had fallen.

All through the excitement occasioned by Brown's remarkable attempt and subsequent behavior, the Massachusetts Legislature, not taking any steps for the defense of her citizens who are likely to be carried to Virginia as witnesses and exposed to the violence of a slaveholding mob, is absorbed in a liquor-agency question. That has, in fact, been the all-absorbing question with it!! I am sure that no person up to the occasion, or who perceived the significance of the former event, could at present attend to this question at all. As for the Legislature, bad spirits occupied their thoughts.[2]

If any person, in a lecture or a conversation, should now cite any ancient example of heroism, such as Cato, or Tell, or Winkelried, passing over the recent deeds and words of John Brown, I am sure that it would be felt by any intelligent audience of Northern men to be tame and inexcusably far-fetched. I do not know of *such* words, uttered under such circumstances, in Roman, or English, or any, history.[3]

It is a fact proving how universal and widely related any transcendent greatness is, like the apex of a

[1] [He had been to Worcester to read his address on John Brown there. See *Familiar Letters*, pp. 358, 359; Riv. 413, 414.]

[2] [*Cape Cod, and Miscellanies*, p. 446; *Misc.*, Riv. 243.]

[3] [*Cape Cod, and Miscellanies*, p. 441; *Misc.*, Riv. 237.]

pyramid to all beneath it, that when I now look over my extracts of the noblest poetry the best is oftenest applicable in part or wholly to this man's position. Almost any noble verse may be read either as his elegy or eulogy or be made the text of an oration on him. Indeed, such are now first discerned to be the parts of a divinely established liturgy, applicable to those rare cases for which the ritual of no church has provided, — the case of heroes, martyrs, and saints. This is the formula established on high, their burial service, to which every great genius has contributed its line or syllable. Of course the ritual of no church which is wedded to the state can contain a service applicable to the case of a state criminal unjustly condemned, — a martyr.

The sense of grand poetry read by the light of this event is brought out distinctly like an invisible writing held to the fire.[1]

About the 23d of October I saw a large flock of goldfinches[2] (judging from their motions and notes) on the tops of the hemlocks up the Assabet, apparently feeding on their seeds, then falling. They were collected in great numbers on the very tops of these trees and flitting from one to another. Rice has since described to me the same phenomenon as observed by him there since (says he saw the birds picking out the seeds), though he did not know what birds they were. William Rice says that these birds get so much of the lettuce seed that you can hardly save any. They get sunflower seeds also. Are called "lettuce-birds" in the books.

[1] [*Cape Cod, and Miscellanies*, pp. 451, 452; *Misc.*, Riv. 249, 250.]

[2] *Vide* Nov. 11th.

A lady who was suitably indignant at the outrage on Senator Sumner, lamenting to me to-day the very common insensibility to such things, said that one woman to whom she described the deed and on whom she thought that she had made some impression, lately inquired of her with feeble curiosity: "How is that young man who had his head hurt? I have n't heard anything about him for a good while."

As I returned over the Corner Bridge I saw cows in the sun half-way down Fair Haven Hill next the Cliff, half a mile off, the declining sun so warmly reflected from their red coats that I could not for some time tell if they were not some still bright-red shrub oaks, — for they had no more form at that distance.

Nov. 17. Another Indian-summer day, as fair as any we 've had. I go down the railroad to Andromeda Ponds this afternoon.

Captain Hubbard is having his large wood — oak and white pine, on the west of the railroad this side the pond — cut. I see one white oak felled with one hundred and fifteen rings to it; another, a red, oak has about the same number. Thus disappear the haunts of the owls. The time may come when their aboriginal *hoo-hoo-hoo* will not be heard hereabouts.

I have been so absorbed of late in Captain Brown's fate as to be surprised whenever I detected the old routine running still, — met persons going about their affairs indifferent. It appeared strange to me that the little dipper should be still diving in the river as of yore; and this suggested that this grebe might be diving here

when Concord shall be no more. Any affecting human event may blind our eyes to natural objects.[1]

At the pond-side I see titmice alighting on the now hoary gray goldenrod and hanging back downward from it, as if eating its seeds; or could they have been looking for insects? There were three or four about it.

I sit in the sun on the northeast side of the first Andromeda Pond, looking over it toward the sun. How fair and memorable this prospect when you stand opposite to the sun, these November afternoons, and look over the red andromeda swamp! — a glowing, warm brown red in the Indian-summer sun, like a bed of moss in a hollow in the woods, with gray high blueberry and straw-colored grasses interspersed. And when, going round it, you look over it in the opposite direction, it presents a gray aspect.

The musquash are active, swimming about in the further pond to-day, — this Indian-summer day. Channing also sees them thus stirring in the river this afternoon.

Nov. 18. A fog this morning and yesterday morning, lasting till about 10 A. M.

I looked into the Church of England liturgy, printed near the beginning of the last century, to find a service applicable to the case of Captain Brown. The only martyr recognized and provided for by it was King Charles the First!! Of all the inhabitants of England and of the world, he was the only one whom that church made a martyr and saint of!! And now for more than

[1] [*Cape Cod, and Miscellanies*, p. 441; *Misc.*, Riv. 237.]

half a century it had celebrated his martyrdom by an annual service! What a satire on the church is that![1]

An apothecary in New Bedford told R.[2] the other day that a man (a Mr. Leonard) of Springfield told him that he once attended a meeting in Springfield where a woman was exhibited as in a mesmeric state, insensible to pain, — a large and fleshy woman, — and the spectators were invited to test her condition with pins or otherwise. After some had tried, one among them came forward with a vial of cowage, and, after stating to the company that it would produce intolerable irritation in the skin, he proceeded to rub a little on the woman's bare arm and on her neck. She immediately winced under it, whereupon he took out another vial containing sweet oil, and, applying a little of that, relieved her. He then stated that any one present might apply to his skin as much as he pleased. Some came forward and he laid bare his breast and when they applied it sparingly and hesitatingly, he said, "Rub away, gentlemen, — as much as you like," and he betrayed no sign of irritation. That man was John Brown.

Nov. 22. Ground white with snow a few hours. C. says that he saw to-day a procession of minnows (one to two inches long) some three or four feet wide, about forty abreast, passing slowly along northerly, close to the shore, at Wharf Rock, Flint's Pond. They were fifteen minutes passing!

[1] [*Cape Cod, and Miscellanies*, p. 446; *Misc.*, Riv. 243, 244.]

[2] [Mr. Ricketson was in Concord from Nov. 19th to 24th, 1859. He walked and supped with Thoreau on the 20th and went to visit him the next day. See *Daniel Ricketson and his Friends*, pp. 312–314.]

Nov. 24. The river has risen considerably, at last, owing to the rain of the 22d. Had been very low before.

See, on the railroad-slope by the pond, and also some days ago, a flock of goldfinches eating the seed of the Roman wormwood. At Spanish Brook Path. the witch-hazel (one flower) lingers.

I observe that ferns grow especially where there is an abrupt or broken bank, as where, in the woods, sand has been anciently dug out of a hillside to make a dam with and the semicircular scar has been covered with a sod and shrubs again. The shelter and steepness are favorable when there is shade and moisture.

How pretty amid the downy and cottony fruits of November the heads of the white anemone, raised a couple of feet from the ground on slender stalks, two or three together, — small heads of yellowish-white down, compact and regular as a thimble beneath, but, at this time, diffusive and bursting forth above, somewhat like a little torch with its flame, — a very neat object!

Nov. 25. P. M. — Paddle to Baker Farm.

The weeds of water-plants have decayed and fallen long since, and left the water along the sides of the river comparatively clear. In this clear, cold water I see no fishes now, and it is as empty as the air. But for some days, at least, or since colder weather, I have noticed the snow-fleas skipping on the surface next the shore. These are rather a cool-weather phenomenon. I see them to-day skipping by thousands in the wet clamshells left by the muskrats.[1]

[1] Probably washed out by rise of river.

Landing at the ash tree above the railroad, I thought I heard the peculiar note of grackles toward the willow-row across the field, and made a memorandum of it, never doubting; but soon after I saw some farmers at work there, and found that it was the squeaking of the wheel that rolled before their plow. It perfectly resembled the grackle's note, and I never should have suspected it if I had not seen the plowers. It is fit that the creaking of the farmer's plow who is working by the riverside should resemble the note of the blackbirds which frequent those fields.

There is a thin ice for half a rod in width along the shore, which shivers and breaks in the undulations of my boat. Those bayonet rushes still standing are much curved.

See but few ducks, — two of them, — and generally few in the fall compared with the spring.

A large whitish-breasted bird is perched on an oak under Lee's Cliff, for half an hour at least. I think it must be a fish hawk (?).

We hear the clattering sound of two ducks — which rise and fly low at first — before we can see them though quite far off by the side of the pond. Our hands and feet are quite cold, and the water freezes on the paddles, but about sundown it grows sensibly warmer and a little misty. Is not this common at this season?

Nov. 26. P. M. — Walk over the Colburn Farm wood-lot south [of] the road.

I find, sometimes, after I have been lotting off a large wood-lot for auction, that I have been cutting new paths to walk in. I cut lines an inch [*sic*] or two long in arbitrary directions, in and around some dense wood-lot which perhaps is not crossed once a month by any mortal, nor has been for thirty or fifty years, and thus I open to myself new works [*sic*], — enough in a lot of forty acres to occupy me for an afternoon. A forty-acre wood-lot which otherwise would not detain a walker more than half an hour, being thus opened and carved out, will entertain him for half a day.

In this case there was a cultivated field here some thirty years ago, but, the wood being suffered to spring up, from being open and revealed this part of the earth became a covert and concealed place. Excepting an occasional hunter who crossed it maybe once in several months, nobody has walked there, nobody has penetrated its recesses. The walker habitually goes round it, or follows the single cart-path that winds through it. Woods, both the primitive and those which are suffered to spring up in cultivated fields, thus preserve the mystery of nature. How private and sacred a place a grove thus becomes! — merely because its denseness excludes man. It is worth the while to have these thickets on various sides of the town, where the rabbit lurks and the jay builds its nest.

When I ran out the boundary lines of this lot, I could commonly distinguish the line, not merely by the different growth of wood, but often by a kind of ditch which I think may have been produced by the plow, which heaped up the soil along the side of the field when it was

cultivated. I could also detect trees variously bent and twisted, which probably had made part of a hedge fence when young, and others which were scarred by the fencing-stuff that had been fastened to them.

The chickadee is the bird of the wood the most unfailing. When, in a windy, or in any, day, you have penetrated some thick wood like this, you are pretty sure to hear its cheery note therein. At this season it is almost their sole inhabitant.

I see here to-day one brown creeper busily inspecting the pitch pines. It begins at the base, and creeps rapidly upward by starts, adhering close to the bark and shifting a little from side to side often till near the top, then suddenly darts off downward to the base of another tree, where it repeats the same course. This has no black cockade, like the nuthatch.

In the midst of this wood there occur less valuable patches, of an eighth of an acre or more, where there is much grass, and cladonia, shrub oaks, and lichen-covered birches, and a few pitch pines only, — places of a comparatively sterile character, as if the soil had been run out. The birches will have much of the birch fungus on them, and their fallen dead tops strew the ground.

Nov. 27. P. M. — To Colburn Farm wood-lot north of C. Hill.

I traverse this wood-lot back and forth by the lines cut by those who have lotted it off. Thus I scare up the partridges in it. A dozen long lines four rods apart are cut through it. Walking through these, I am pretty sure to scare up what partridges there are in it, and there

are few wood-lots of this size which have not some in them at present.

Come upon a large ant-hill in the midst of the wood, but no ants on it. It has made an open and bare spot in the woods, ten or twelve feet in diameter. Its mound is partly grassed over, as usual, and trees have been prevented from springing up by the labors of the ants beneath. As this wood is about thirty years old, it may prove that the ant-hill is of the same age!

On the 22d the ground was white with snow for a few hours only. Yet, though you saw no more of it generally the latter part of that day, I still see some of it in cold, wet, shaded places, as amid andromeda and cranberry vines.

This wood-lot, especially at the northwest base of the hill, is extensively carpeted with the *Lycopodium complanatum* and also much *dendroideum* and *Chimaphila umbellata*. The former, methinks, abounds especially in shady and rather moist, and I think old, or rather diseased, and *cold* (?), woods. It covers the earth densely, even under the thickest white pine groves, and equally grows under birches. It surprises you as if the trees stood in green grass where you commonly see only withered leaves.

The Greeks and Romans made much of honey because they had no sugar; olive oil also was very important. Our poets (?) still sing of honey, though we have sugar, and oil, though we do not produce and scarcely use it.

The principal flight of geese is said to have been a few days before the 24th. I have seen none.

Nov. 28. P. M. — To E. Hubbard's Wood.

Goodwin tells me that Therien, who lives in a shanty of his own building and alone in Lincoln, uses for a drink only checkerberry-tea. (G. also called it "ivory-leaf.") Is it not singular that probably only one *tea*-drinker in this neighborhood should use for his beverage a plant which grows here? Therien, really drinking his checkerberry-tea from motives of simplicity or economy and saying nothing about it, deserves well of his country. As he does now, we may all do at last.

There is scarcely a wood of sufficient size and density left now for an owl to haunt in, and if I hear one hoot I may be sure where he is.

Goodwin is cutting out a few cords of dead wood in the midst of E. Hubbard's old lot. This has been Hubbard's practice for thirty years or more, and so, it would seem, they are all dead before he gets to them.

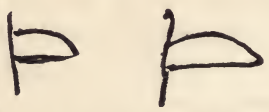
Saw Abel Brooks there with a half-bushel basket on his arm. He was picking up chips on his and neighboring lots; had got about two quarts of old and blackened pine chips, and with these was returning home at dusk more than a mile. Such a petty quantity as you would hardly have gone to the end of your yard for, and yet he said that he had got more than two cords of them at home, which he had collected thus and sometimes with a wheelbarrow. He had thus spent an hour or two and walked two or three miles in a cool November evening to pick up two quarts of pine chips scattered through the woods. He evidently takes real satisfaction in collecting his fuel, perhaps gets more heat of all kinds out of it than any man in town. He is not reduced to

taking a walk for exercise as some are. It is one thing to *own* a wood-lot as he does who perambulates its bounds almost daily, so as to have worn a path about it, and another to own one as many another does who hardly knows where it is. Evidently the quantity of chips in his basket is not essential; it is the chippy idea which he pursues. It is to him an unaccountably pleasing occupation. And no doubt he loves to see his pile grow at home.

Think how variously men spend the same hour in the same village! The lawyer sits talking with his client in the twilight; the trader is weighing sugar and salt; while Abel Brooks is hastening home from the woods with his basket half full of chips. I think I should prefer to be with Brooks. He was literally as smiling as a basket of chips. A basket of chips, therefore, must have been regarded as a singularly pleasing (if not pleased) object.

We make a good deal of the early twilights of these November days, they make so large a part of the afternoon.

Nov. 29. P. M. — To Copan.

There is a white birch on Copan which has many of the common birch fungus of a very peculiar and remarkable form, not flat thus:  but shaped like a bell or short horn, thus: as if composed of a more flowing material which had settled downward like a drop. As C. said, they were shaped like icicles, especially those short and spreading ones about bridges.

Saw quite a flock of snow buntings not yet very white. They rose from the midst of a stubble-field unexpectedly. The moment they settled after wheeling around, they were perfectly concealed, though quite near, and I could only hear their rippling note from the earth from time to time.

Nov. 30. I am one of a committee of four, *viz.* Simon Brown (Ex-Lieutenant-Governor), R. W. Emerson, myself, and John Keyes (late High Sheriff), instructed by a meeting of citizens to ask liberty of the selectmen to have the bell of the first parish tolled at the time Captain Brown is being hung, and while we shall be assembled in the town house to express our sympathy with him. I applied to the selectmen yesterday. Their names are George M. Brooks, Barzillai Hudson, and Julius Smith. After various delays they at length answer me to-night that they "are uncertain whether they have any control over the bell, but that, *in any case*, they will not give their consent to have the bell tolled." Beside their private objections, they are influenced by the remarks of a few individuals. Dr. Bartlett tells me that Rockwood Hoar said he "hoped no such foolish thing would be done," and he also named Stedman Buttrick, John Moore, Cheney (and others added Nathan Brooks, senior, and Francis Wheeler) as strongly opposed to it; said that he had heard "five hundred" (!) damn me for it, and that he had no doubt that if it were done some counter-demonstration would be made, such as firing minute-guns. The doctor himself is more excited than anybody, for

he has the minister under his wing. Indeed, a considerable part of Concord are in the condition of Virginia to-day, — afraid of their own shadows.

I see in E. Hubbard's gray oak wood, four rods from the old wall line and two or three rods over the brow of the hill, an apparent downy woodpecker's nest in a dead white oak stub some six feet high. It is made as far as I can see, like that which I have, but looks quite fresh, and I see, by the very numerous fresh white chips of dead wood scattered *over* the recently fallen leaves beneath, that it must have been made since the leaves fell. Could it be a nuthatch or chickadee's work? [1]

This has been a very pleasant month, with quite a number of Indian-summer days, — a pleasanter month than October was. It is quite warm to-day, and as I go home at dusk on the railroad causeway, I hear a hylodes peeping.

[1] [Probably a downy woodpecker's winter quarters.]

END OF VOLUME XII

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